Trees and Shrubs of Prospect Park

UC-NRLF
$B 25 000

Louis Harman Peet

Ex-libris
Charles Atwood
Kofoid

THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA

PRESENTED BY
PROF. CHARLES A. KOFOID AND
MRS. PRUDENCE W. KOFOID

INDEX MAP OF
PROSPECT PARK
SHOWING AREAS COVERED BY THE
SECTIONAL DIAGRAMS
MEADOW
THE
LAKE
QUAKER CEMETERY
WILLINK ENTRANCE
PARADE GROUND
1
2
3
4
5
6
7
8
9
10
11
12

Trees and Shrubs of Prospect Park

By LOUIS HARMAN PEET

NEW YORK, N.Y.

AMERICAN PRINTING HOUSE
318 and 320 East Twenty-third Street, New York

Copyright, 1902, by
Louis Harman Peet

SB 483
B85P4

To My Wife

N · M · P ·

PREFACE.

THIS book has been prepared to aid the city nature lovers who frequent our beautiful Park in identifying its trees and shrubs by diagrams of location and text description. Its need grew out of actual experience and it is hoped that its service will be direct and practical.

How many there are who come to our Park to whom the trees are simply trees and the shrubs, bushes. The individuality of the oak, the hornbeam, or the maple is lost to them in the general mass. Many of these would gladly learn had they the time or opportunity and to meet the needs of such and also to supplement mere identification with descriptions of characteristics of form, foliage, flower and fruit, has been the governing purpose in the general plan of preparing this book. Its method is self-evident and the park rambler, following the paths, soon gets to recognize the various *types* of trees and shrubs. These grow more and more distinctive and individual as their observed characteristics become more familiar to him and he finds out that when these have been once learned thoroughly, not only has he learned them for Prospect Park, but for Central Park, and, in short, for the parks of most cities of climatic conditions similar to ours.

Of course, in using this book, it must be borne in mind that it would be utterly impossible to locate

every tree and shrub passed along the Walks, on the sectional diagrams. Only those mentioned in the descriptive text are plotted and in using the diagrams to locate these care in judging distances should be exercised. To attempt to plot, on diagrams of the scales used in this book, every tree or shrub along the pathside would result in a mass of black spots from which it would be impossible to distinguish anything. It was therefore thought best to locate *some* of the *representative types* clearly and distinctly rather than to attempt to locate *all* from which *none* could be definitely found. Try to find shrubs or trees on the diagrams at easily distinguishable points and work from these to others, verifying, as you go along, by the descriptive text. If you find you have not judged the distances rightly, the descriptive text should act as a check upon you to set you right.

To further assist the user of this hand-book in the identification of the representative dots upon the diagrams various landmarks, such as lamp-posts, statues, tablets, arches, rustic shelters have been extensively marked and these will serve to rectify wrong or to reassure correct judgments of distancing.

So let the lover of nature, who walks here in his leisure hours take up the study of these beautiful trees and shrubs with the determined purpose of *knowing* them. In the knowing of them this book can be but a suggestive aid. If you would get the most from it, follow up its hints in your botanical text and reference books. Indeed this is the proper way to use the book. It is intended to show you a *little* and then

you yourself must do *more* by following up the hint, enlarging your knowledge by wider studies of the details of bud, flower, leaf, bark and general characteristics of habits of growth.

For this further study of details, the author strongly recommends the use of such excellent text-books as Gray's Field, Forest and Garden Botany, revised by L. H. Bailey, Keeler's Our Native Trees (which is equipped with excellent photographs), Apgar's Trees of the Northern United States, Dame and Brooks's Hand-book of the Trees of New England. Any of these makes a good field book to take with you on your rambles. If you wish to go further, the following larger works will be found of great practical value: Loudon's Cyclopedia of Trees, Bailey's Cyclopedia of Horticulture, Sargent's Silva of North America, Britton and Brown's Flora of the Northeastern United States, Emerson's Report on the Trees and Shrubs of Massachusetts. These can be consulted in any good sized library.

In the preparation and completion of this book the author wishes to express his thanks for many courtesies extended by Commissioner Richard Young of the Park Department and for much practical aid and valuable suggestions most cordially given by Mr. John Whalley, Arboriculturist of Prospect Park and Mr. Edward Kasold, Foreman Tree Planter of Prospect Park.

The author's acknowledgments for valuable information regarding many of the rare varieties are also hereby expressed to Dr. C. S. Sargent of the Arnold

Arboretum, Dr. Charles H. Peck, State Botanist of New York, to Messrs. Ellwanger and Barry of the Mount Hope Nurseries, Rochester, N. Y., to Mr. S. B. Parsons and Mr. Theodore Lawlor of the Parsons Nurseries, Flushing, N. Y., and to his friend and fellow park rambler, Dr. L. Frazee, of this city, whose ripe knowledge, generous sympathy and cordial interest in the preparation of this book has helped very materially in its completion.

The author wishes also to express his appreciation of the skillful work done on his sectional diagrams by Mr. Edward Yorke Farquhar of Flatbush.

LOUIS HARMAN PEET.

755 Ocean Avenue,
Flatbush, Brooklyn, N. Y.

CONTENTS.

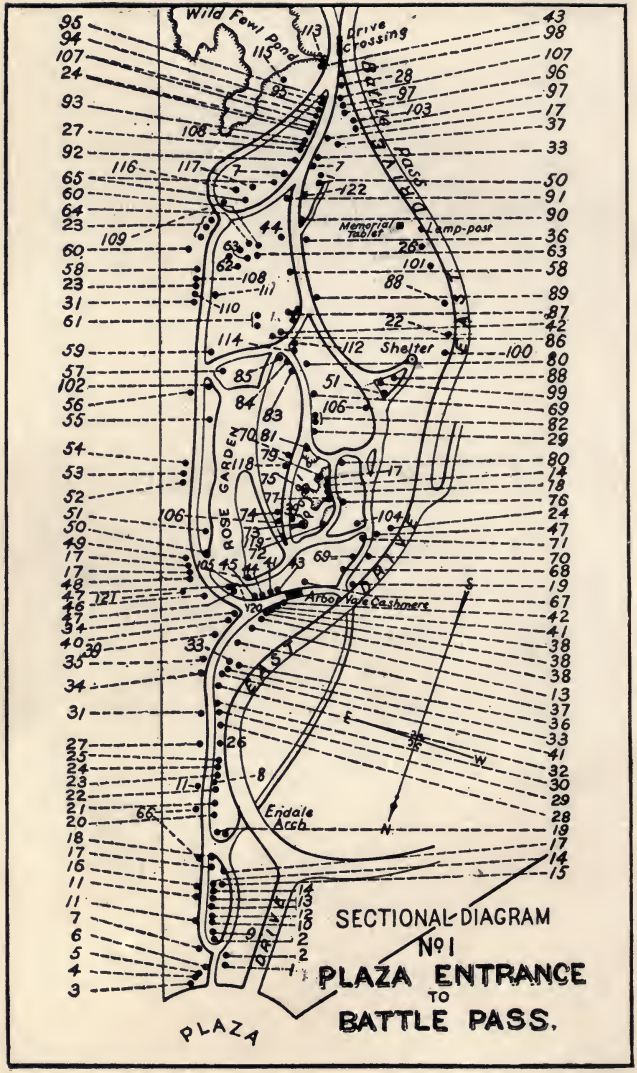
CHAPTER		PAGE
I.	Plaza Entrance to Battle Pass	7
II.	Battle Pass to Flower Garden	26
III.	Flower Garden	43
IV.	Willink Entrance to Irving Statue	57
V.	Irving Statue to Ocean Avenue Entrance	72
VI.	Lincoln Statue to First Summer House	90
VII.	First Summer House to Second Summer House, Large Lake	103
VIII.	Second to Fourth Summer House, Large Lake	119
IX.	Fourth Summer House to Breeze Hill	133
X.	Around Lullwater	161
XI.	Music Stand to Long Meadow	188
XII.	Long Meadow to Plaza Entrance	206
	Index	221

LIST OF SECTIONAL DIAGRAMS.

General Index Map ..... Frontispiece

	PAGE
Sectional Diagram No. 1	2
Sectional Diagram No. 2	22
Sectional Diagram No. 3	38
Sectional Diagram No. 4	54
Sectional Diagram No. 5	68
Sectional Diagram No. 6	86
Sectional Diagram No. 7	100
Sectional Diagram No. 8	116
Sectional Diagram No. 9	128
Sectional Diagram No. 10	156
Sectional Diagram No. 11	184
Sectional Diagram No. 12	202

TREES AND SHRUBS OF PROSPECT PARK


Wild Fowl Pond
Drive Crossing
Battle Pass Drive
Memorial Tablet
Lamp-post
Shelter
ROSE GARDEN
Arbor Vale Cashmeres
Endale Arch
PLAZA
SECTIONAL DIAGRAM
No 1
PLAZA ENTRANCE
TO
BATTLE PASS.

Explanations, Sectional Diagram No. 1

Common Name	Botanical Name
1. Weeping English oak.	*Quercus robur, var. pendula.*
2. Austrian pine.	*Pinus Austriaca.*
3. Swiss stone pine.	*Pinus Cembra.*
4. Japan ground cypress or Japan arbor vitæ. (Golden plume-leaved)	*Chamæcyparis* (or *Retinospora*) *pisifera, var. plumosa aurea.*
5. Japan ground cypress or Japan arbor vitæ. (Plume-leaved).	*Chamæcyparis* (*or Retinospora*) *pisifera, var. plumosa.*
6. Japan ground cypress or Japan arbor vitæ. (Variety *squarrosa*).	*Chamæcyparis* (*or Retinospora*) *pisifera, var. squarrosa.*
7. Kœlreuteria.	*Kœlreuteria paniculata.*
8 Bumald's spiræa.	*Spiræa Japonica, var. Bumalda.*
9. Eagle's claw maple.	*Acer platanoides, var. laciniatum.*
10. Silver maple.	*Acer dasycarpum.*
11. Scotch elm.	*Ulmus montana.*
12. Paper or canoe birch.	*Betula papyrifera.*
13. Nordmann's silver fir.	*Abies Nordmanniana.*
14. Oriental spruce.	*Picea Orientalis.*
15. Cornelian cherry.	*Cornus mascula.*
16. Weeping European beech.	*Fagus sylvatica, var. pendula.*
17. Judas tree or redbud.	*Cercis Canadensis.*
18. Japan quince.	*Cydonia Japonica.*
19. Copper beech.	*Fagus sylvatica, var. cuprea.*
20. English hawthorn.	*Cratægus oxyacantha.*
21. Bush cranberry.	*Viburnum opulis.*
22. American basswood.	*Tilia Americana.*
23. European flowering ash.	*Fraxinus ornus.*
24. Silver bell or snowdrop tree.	*Halesia tetraptera.*
25. English field maple.	*Acer campestre.*
26. European linden.	*Tilia Europæa.*

Common Name	Botanical Name
27. European silver linden.	*Tilia Europæa, var. argentea.*
28. Smoke tree.	*Rhus cotinus.*
29. Reeve's or lance-leaved spiræa.	*Spiræa Reevesiana.*
30. Reeve's double flowered spiræa.	*Spiræa Reevesiana, var. flore pleno.*
31. Mugho pine.	*Pinus montana var. Mughus.*
32. Common locust.	*Robinia pseudacacia.*
33. Cephalonian silver fir.	*Abies Cephalonica.*
34. Japan quince.	*Cydonia Japonica.*
35. Hop hornbeam or iron-wood.	*Ostrya Virginica.*
36. Kentucky coffee tree.	*Gymnocladus Canadensis.*
37. Bhotan pine.	*Pinus excelsa.*
38. Japan pagoda tree.	*Sophora Japonica.*
39. European hornbeam.	*Carpinus betulus.*
40. Common snowball or guelder rose.	*Viburnum opulis, var. sterilis.*
41. Hemlock.	*Tsuga Canadensis.*
42. Golden bell or Forsythia.	*Forsythia viridissima.*
43. Sassafras.	*Sassafras officinale.*
44. Bridal wreath spiræa.	*Spiræa prunifolia.*
45. French mulberry.	*Callicarpa Americana.*
46. Dwarf mountain sumac.	*Rhus copallina.*
47. Fragrant honeysuckle.	*Lonicera fragrantissima.*
48. European holly.	*Ilex aquifolium.*
49. Shady hydrangea.	*Hydrangea arborescens.*
50. Yellow-wood.	*Cladrastis tinctoria.*
51. Norway maple.	*Acer platanoides.*
52. European hazel.	*Corylus avellana.*
53. Staghorn sumac.	*Rhus typhina.*
54. American hazel.	*Corylus Americana.*
55. Arrowwood.	*Viburnum dentatum.*
56. Common elder.	*Sambucus Canadensis.*
57. Oriental plane tree.	*Platanus Orientalis.*
58. White mulberry.	*Morus alba.*
59. Oriental plane tree.	*Platanus Orientalis.*
60. Scotch pine.	*Pinus sylvestris.*
61. Common horsechestnut.	*Æsculus hippocastanum.*
62. Dwarf or Japan catalpa.	*Catalpa Bungei.*
63. Indian bean tree or Southern catalpa.	*Catalpa bignonioides.*
64. Weeping willow.	*Salix Babylonica.*

Common Name	Botanical Name
65. English oak.	*Quercus robur.*
66. Large-racemed dwarf horsechestnut.	*Pavia macrostachya.*
67. Slender Deutzia.	*Deutzia gracilis.*
68. Purple barberry.	*Berberis vulgaris, var. purpurea.*
69. Flowering dogwood.	*Cornus florida.*
70. Fern-leaved beech.	*Fagus sylvatica, var. heterophylla.*
71. Five leaved akebia.	*Azalea amœna.*
72. Cockspur thorn variety pyracanthafolia.	*Cratægus crus-galli, var. pyracanthafolia.*
73. Lovely azalea.	*Azalea amœna.*
74. Mock orange or sweet syringa.	*Philadelphus coronarius.*
75. Weeping Japan pagoda tree.	*Sophora Japonica, var. pendula.*
76. Weeping Norway spruce.	*Pecia excelsa, var. inverta.*
77. Andromeda. (axillary flowers).	*Andromeda axillaris.*
78. Hercules's club, Devil's walking stick, or Angelica tree.	*Aralia spinosa.*
79. Buttonbush.	*Cephalanthus occidentalis.*
80. Soulange's magnolia.	*Magnolia Soulangeana.*
81. Fortune's dwarf white spiræa.	*Spiræa callosa, var. alba.*
82. English cork-bark elm.	*Ulmus campestris, var. suberosa.*
83. Umbrella tree.	*Magnolia umbrella.*
84. Tartarian honeysuckle.	*Lonicera Tartarica.*
85. Hercules's club, Devil's walking stick, or Angelica tree.	*Aralia spinosa.*
86. Purple-leaved elm.	*Ulmus campestris, var. stricta purpurea.*
87. Clump of Austrian pines, Scotch pines, hemlocks and Swiss stone pine.	
88. Tulip tree.	*Liriodendron tulipifera.*
89. Corsican pine.	*Pinus Austriaca, var. laricio.*
90. Weigela.	*Diervilla rosea.*
91. Black walnut.	*Juglans nigra.*

Common Name	Botanical Name
92. American white ash.	*Fraxinus Americana.*
93. Ash-leaved maple or box elder.	*Negundo aceroides.*
94. Californian privet.	*Ligustrum ovalifolium.*
95. Scarlet fruited thorn.	*Cratægus coccinea.*
96. Sweet gum.	*Liquidambar styraciflua.*
97. American buttonwood.	*Platanus occidentalis.*
98. Cornelian cherry.	*Cornus mascula.*
99. Sugar maple.	*Acer saccharinum.*
100. Spanish chestnut.	*Castanea sativa.*
101. Scarlet oak.	*Quercus coccinea.*
102. European beech.	*Fagus sylvatica.*
103. River or red birch.	*Betula nigra.*
104. Weeping European ash.	*Fraxinus excelsior, var. monophylla.*
105. Hall's Japan magnolia.	*Magnolia stellata* (or *Halliana*).
106. Sweet bay or swamp magnolia.	*Magnolia glauca.*
107. Spicebush.	*Benzoin benzoin.*
108. Willow-leaved European ash.	*Fraxinus excelsior, var. salicifolia.*
109. Turkey oak.	*Quercus cerris.*
110. Single-leaved European ash.	*Fraxinus excelsior, var. monophylla.*
111. Willow oak.	*Quercus phellos.*
112. Oleaster.	*Elæagnus angustifolia.*
113. European or tree alder.	*Alnus glutinosa.*
114. Sessile-leaved Weigela.	*Diervilla sessilifolia.*
115. American beech.	*Fagus ferruginea.*
116. Red oak.	*Quercus rubra.*
117. Bur oak or mossy cup oak.	*Quercus macrocarpa.*
118. Smooth winterberry.	*Ilex lævigata.*
119. Thunberg's or winged spindle tree.	*Euonymus Thunbergianus,* or *Euonymus alatus.*
120. European mountain-ash.	*Pyrus aucuparia.*
121. American holly.	*Ilex opaca.*
122. English walnut, or Madeira nut.	*Juglans regia.*

TREES AND SHRUBS OF PROSPECT PARK

I.

PLAZA ENTRANCE TO BATTLE PASS.

"I wonder what that is!"

This is the exclamation one hears so often, while strolling through the Park, from the casual rambler, suddenly arrested by the beauty of some shrub or tree. There are many people frequenting the Park who take more than a passing interest in the wealth of beautiful things gathered there for their delight and it is to these people that these articles are especially addressed.

If you enter at the Plaza, taking the Walk east or at the left of the Drive, almost the first thing to greet you is the remarkable weeping English oak *(Quercus robur, var. pendula)*. It stands on the right of the Walk, about midway from the entrance to the first fork of the Walk. Its leaves are on very short stalks and deeply cut in. For oak leaves they are small. Well-grown Austrian pines *(Pinus Austriaca)* stand about here, quite conspicuously; one, just at the bend of the fork. They are fine, hardy trees and glorious sights when the ice storms coat them with crystal. They

may be known easily by their chunky, sturdy appearance and tufting habit of bunching their leaves. As you entered you passed on the left Swiss stone pine, near the corner of the stone wall and beside it *Retinospora pisifera, var. plumosa aurea* (golden plume-leaved). Nearer the Walk there is a variety of this plume-leaved *Retinospora* which is not golden, and beside it, close by the Walk and about opposite the Turkey oak is a fine *Retinospora squarrosa* which you can know by its bluish silvery-green foliage. It is called *squarrosa* because its leaves set out squarely from the branch. Just a little beyond, the Walk divides, one fork (the left) running close to the ridge that hides the screaming trolley-cars as they plunge down the hill to Flatbush, and the other fork following along by the Drive until it meets the Long Meadow from under Endale Arch.

If you take the fork by the ridge, the left-hand one, you will pass Austrian pine, on the point made by the fork of the Walk, Eagle's claw maple (*Acer platanoides, var. laciniatum),* a cut leaved variety of the Norway maple, and called "Eagle's claw" from the resemblance of its drooping leaves to the talons of that bird. On the left you have passed *Kœlreuteria* and Scotch elm *(Ulmus montana)* about opposite the Eagle's claw maple. Continuing, you pass, on the right, a beautiful white birch (paper or canoe birch); two or three little Nordmann silver firs, two very well formed Oriental spruces, Cornelian cherry, hemlock, Judas trees and Japan quince.

On the left of the Walk you will find a handsome

weeping beech (about opposite the two Oriental spruces) and not far from the weeping beech, clumps of the large racemed dwarf horse-chestnut (*Pavia macrostachya)* or long racemed buckeye, so handsome when in bloom in July. It is then covered with tall spires of white bloom.

Near this spot the Walk sends off a short arm to the right, to Endale Arch. We do not turn off but keep along the path we are on, which climbs by a gentle rise toward the Arbor at Vale Cashmere.

Continuing then, from the two handsome copper beeches which stand side by side on the southerly side of the offshoot to Endale Arch, you pass, on the right beautiful young English hawthorns *(Cratægus oxyacantha),* which you can know by their small cut-lobed leaves wedge-shaped at the base and by their thorns; clumps of *Viburnum opulis* or bush cranberry; American basswood with large heart-shaped leaves, Bumald's spiræa, which bears rose-colored flowers in midsummer and graceful silver bell or snow-drop trees *(Halesia tetraptera).* You can tell these last by the streaking lines through their bark. These trees are very beautiful in the spring when they are hung full of white bell shaped flowers (whence their name) just as the leaves appear. So pure, so fairy-like they seem, you can easily set them tinkling with a music never heard on sea or land—the flower herald-music of the spring! Further along are European flowering ash, English field maple *(Acer campestre),* European linden, smoke tree *(Rhus cotinus),* Cephalonian silver firs (two of them very near to-

gether, with symmetrical conical tops), Kentucky coffee tree, Bhotan pine (noticeable by reason of its four trunks grown together at the base), *Sophora Japonica* (Japan pagoda tree), called so from the Arabian *Sophera,* a tree with pea-shaped flowers, and, further on, hemlock. On the left you have passed Scotch pines *(Pinus sylvestris),* European silver lindens *(Tilia Europœa, var. argentea),* about opposite the smoke tree, Nordmann's silver fir, dwarf or Mugho pine *(Pinus montana, var. Mughus),* barberry, a good hop hornbeam or iron wood *(Ostrya Virginica),* opposite the Cephalonian silver firs, and very near the point where the Walk forks at the left, to go down to Rose Garden, a Japan snowball and a fine Japan quince.

Just before you get to the Arbor look out, on your left, for a shrub which perhaps you may have already noticed, late in the autumn, hung full of small delicate berries, of a beautiful violet shade, strung all along its slender branches. This is the French mulberry *(Callicarpa Americana),* called so from Greek words meaning *beauty* and *fruit.* You will find it on the left as you approach the Arbor just beyond the fork of the Walk to the Rose Garden, and beside a clump of bridal wreath spiræa (*Spiræa prunifolia*). The bridal wreath spiræa is well worth seeing in May when it hangs all along its slender branches pure white flowers in little umbels. It is very beautiful then and well deserves its name.

If you do not care to go through the Arbor, take the turn of the path which leads off to the left just before you come to the Arbor and slips by a gentle

decline to the Rose Garden. This little side path has treasures, too: especially the glorious clump of dwarf mountain sumac or shining sumac *(Rhus copallina)* which is a blaze of rich scarlet in the fall. The distinguishing feature of this shrub is its leaf stem, which is winged between the leaflets. On the right of the path are splendid bushes of the early fly honeysuckle *(Lonicera fragrantissima)*. This honeysuckle is half evergreen in our vicinity and is easily recognized by the little cusp or point that tips its thick ovate leaves.

As the path reaches the Rose Garden it branches off with a fork to the left, which in summer runs along a delightfully shaded path, parallel with Flatbush Avenue for some little distance. Dense growths of bushes almost make it a country wayside. If you walk here in early summer you will find clumps of trailing bittersweet or nightshade *(Solanum dulcamara)* with beautiful violet flowers which later, develop into shining ruby berries that hang all over the plant. Let these berries alone. You can look at them, but don't touch them: that is the safest way. Overhead the beautiful Bhotan pines hang their silvery tassel-like bunches of needles all trembling and shimmering with every breeze. Fine Norway maples throw grateful shades. Further along, on the left, are goodly growths of hazel and great masses of stag-horn sumac *(Rhus typhina)*. On the right dense masses of *Viburnum dentatum* or arrow-wood, and nine-bark *Physocarpus* (or *Spiræa*) *opulifolia*. The leaf of the arrow-wood is very beautiful in the regularity of its notching. A glance at the ragged tattered stems of the nine-bark tells that it

lives up to its name and you think you could peel off more than nine layers of its bark without half trying. Great masses of elder *(Sambucus)* are here also and when they are in bloom (June or July) they seem to fill the path with drifts of snow. When you have followed this Walk to a point about opposite the extreme southerly end of the Rose Garden, it throws off a branch at right angles. This branch leads over toward Vale Cashmere, a lovely spot, in whose bosom a little dreaming pool lies half asleep, trembling to the soft music of a fountain that seems to never tire of playing with rainbows in the sunshine. We shall not take this yet, but will continue along the path we are on, keeping parallel with Flatbush Avenue. We come out now into an open space with a fine stretch of grass waving gently up to the brow of a rise. This rise is crowned with a picturesque and historic old weeping willow which flung its whispering leaves to the drum-beat of the Revolution, and near it stand a cluster of Indian bean trees *(Catalpa bignonioides),* which are fine sights in the last days of June or the early days of July when they set all their white horns (spotted with yellow and purple) and blow forth their silent beauty. The far right-hand crest of this slope is set with fine clumps of Austrian and Scotch pine. While you are looking at these, notice also the two splendid horse-chestnut trees (a little lower on the slope) that tower side by side, like twins in their similarity. They are beautifully formed trees, absolutely perfect specimens of their kind, both in leafage and symmetry of form.

If now, you continue straight on south along the

Walk, you will pass, on the left, Mugho pine, single-leaved European ash, European flowering ash, willow-leaved European ash, white mulberry, Scotch pine and several European flowering ashes again. Just beyond these the path forks again, the left branch slipping off down a delightful series of steps, leading under whispering hornbeams and rustling oaks and maples, while the right branch swings gently around toward the vicinity of Battle Pass. Almost opposite the fork of the Walks stands a good type of the Turkey oak. We will take the right-hand fork. Along it you will be delighted in autumn by the tall heads of the iron weed *(Vernonia novaboracensis)* that reach out to you in cool purple from the grassy bankside at your right. Sturdy English oaks *(Quercus robur)* line the path on the left, easily known by their leaves which are on very short stems and have a wavy-lobed cut. They are somewhat like the leaf of our white oak, but are loosely eared at the base and thicker. Their acorns have beautiful nuts, long, polished, cigar-like at point, and set in small clean-cut saucer-like caps. Down the slope a little, forming the point of a triangle with the Turkey oak and an English oak, stands a handsome red oak.

Let us now go back to the Arbor that looks down into Vale Cashmere and start again from that particular point, taking the path which leaves it from the west. This Arbor is a beautiful place at all times. It is hard to say when you like it best, be it May or June when the Wistaria, the laurel, the azaleas and the rhododendrons are in their glory or later, in July

or August, when the trumpet creeper *(Tecoma* or *Bignonia radicans)* pushes out its long scarlet horns and calls the humming birds.

As you leave the Arbor, the path bends to the left and runs beside East Drive southward. To your left are *azaleas, Deuzia gracilis,* purple leaved barberries, Japan quince, bridal wreath spiræas, dogwood and, climbing high in air at the point where a branch path leads down to the Pool, a fine *Akebia quinata,* with clover-like leaves (notched at the top) and plum-colored flowers in the spring. On your right you have passed copper beeches (near the drive-crossing), fern-leaved beech, diagonally opposite the young dogwoods on the other side of the path, fragrant honeysuckle with its cusp tipped leaves, silver bell *(Halesia tetra-ptera)* called so from its seed, which is four (tetra) winged (ptera).

Take now the little branch path at the left, down a series of steps to the Pool at the bottom of Vale Çashmere, passing on your right a weeping European ash. If it is syringa (more properly *Philadelphus)* time, the way is through a veritable snowdrift of blossoms. *Philadelphus coronarius* is here, and *Philadelphus grandiflorus* with large ovate leaves, pointed and toothed, smooth and quite downy and sweeping recurving branches which at once mark it from the *coronarius.*

At the bottom of the series of steps is the cozy Pool. If it is early spring the *Azalea amœna,* truly called the "lovely," spreads a mass of crimson on the point of land over there back of the fountain. Here, close to

the Walk (the westerly, beside the Pool) is a cockspur thorn of the variety *pyracanthafolia,* and if you follow this Walk around the margin of the Pool you will pass *Aralia spinosa, Andromeda axillaris* with blossoms, on curving stems, like rows of little lilies of the valley, Oriental spruce, magnificent rhododendrons, weeping Norway spruce, *Forsythia viridissima,* button bush *(Cephalanthus occidentalis)* and sweet pepperbush *(Clethra alnifolia),* near the stone posts at the southern end of the Pool, *Spiræa callosa, var. alba* and Indian currant or coral berry *(Symphoricarpos vulgaris).* On the little peninsula, almost in the center of the Pool, stands a curious tree which you can easily pick out by its umbrella-like form. It is a weeping variety of the Japan pagoda tree or *Sophora Japonica.* The *Sophora* gets its name from its pea-like flowers and fruit. Around on the eastern side of the Pool you will find the smooth winterberry *(Ilex lævigata),* the sweet bay or swamp magnolia *(Magnolia glauca),* and hidden a little back from the Walk, near a fork of the path to Rose Garden, the *Euonymus Thunbergianus* or *Euonymus alatus,* remarkable for the corky wings on its branches.

From the Pool, going south, the path forks into two branches. The left runs past magnificent clumps of *Viburnum plicatum, Spiræa Reevesiana, Spiræa Van Houttei,* cork barked elms, umbrella trees, with leaves a foot long and over, Tartarian honeysuckle, with bright red berries in summer, *Magnolia Soulangeana,* covered in April with beautiful white flowers flushed with pink (pink on the outside, white on the inside).

Just beyond the *Soulangeana,* the path forks again. The left branch slips around by clumps of Hercules's club *(Aralia spinosa),* common snowball *(Viburnum opulis, var. sterilis), Weigela,* to meet the Walk, above spoken of, which follows parallel with Flatbush Avenue. The right branch glides along by easy turns to meet the Battle Pass Walk. This bends by bushes of sessile-leaved *Weigela,* oleaster, well grown Austrian pines, hemlocks, under boughs of cherry birch which hang heavy with the gold lace of flowering catkins in the spring. This path bends now into the Walk which runs on down behind the rocky ramparts which an historic plate commemorates as Battle Pass. If you follow it from this point you will wander by a good sized Corsican pine on the right and a well grown Kentucky coffee tree, on the same side, a little beyond. About opposite the Kentucky coffee tree is a beautiful bush of the bridal wreath spiræa *(Spiræa prunifolia)* and almost at the point of intersection of this path with the Walk by the English oaks, spoken of above, stands an historic old black walnut "Which," says one of the Park reports, "Is the only one left of a former group which occupied the high ground near Valley Grove Road." Close by is the historic weeping willow *(Salix Babylonica)* above spoken of, which is also the only one remaining of a former group. About opposite the black walnut, you will find on the right of the Walk, English walnut, distinguishable by its compound leaves of from five to nine leaflets which are indistinctly serrate.

The ledge of rock which bears the Battle Pass tablet

is crowned with a goodly company of conifers. Among them you will find the beautiful Himalayan or Bhotan pine with its soft and silvery tassels of leaves, the handsome Cephalonian silver firs with their stiff brush-like branches, the common white pines (*Pinus strobus*) with their short slender needles and the Norway sypruces with their strong incurved leaves Come here when the wind sounds his orchestral music. Stand in this little grove and listen. The harp, the violin, the 'cello are all ringing with the melodies of heaven. Elder grows here in great clumps, making beautiful sights in early summer with their cymes of white bloom. Here, too, the lovely Hall's Japan honeysuckle creeps and climbs and sets its fragrant flowers to the air, white changing slowly to yellow. The spot is a veritable little wood glen. Its floor is covered with dry brown needles which have fallen from the conifers and it sends up whiffs of spicy, pungent resin that carry you away, as by magic, to deep dark woods. This is one of the joys of Park rambling. A rock, a dell, stumbled into, sets wing to a thousand woodland memories and you live over again those days which if you are a city worker, are so rare and so lovely to you.

Behind the evergreen-crowned ledge the Walk slips on down a good grade toward the Willink Entrance, passing on the right *Kœlreuteria,* Cephalonian silver fir, Bhotan pine, *Forsythia viridissima* with its golden stars in early spring, syringa with snow in June, celandine, tall sweet gums or liquid ambers, leopard coated buttonwoods, spice bush, smoke trees rolling out their

clouds of bloom in June and Cornelian cherry with its pretty clusters of dull yellow flowers which are almost the first to break out in early spring, before its leaves are out. Over on the border of the Drive, a little northwest of the sweet gums and buttonwoods you will find the River or Red Birch with gray-brown bark touched with cinnamon and rhombic-ovate leaves.

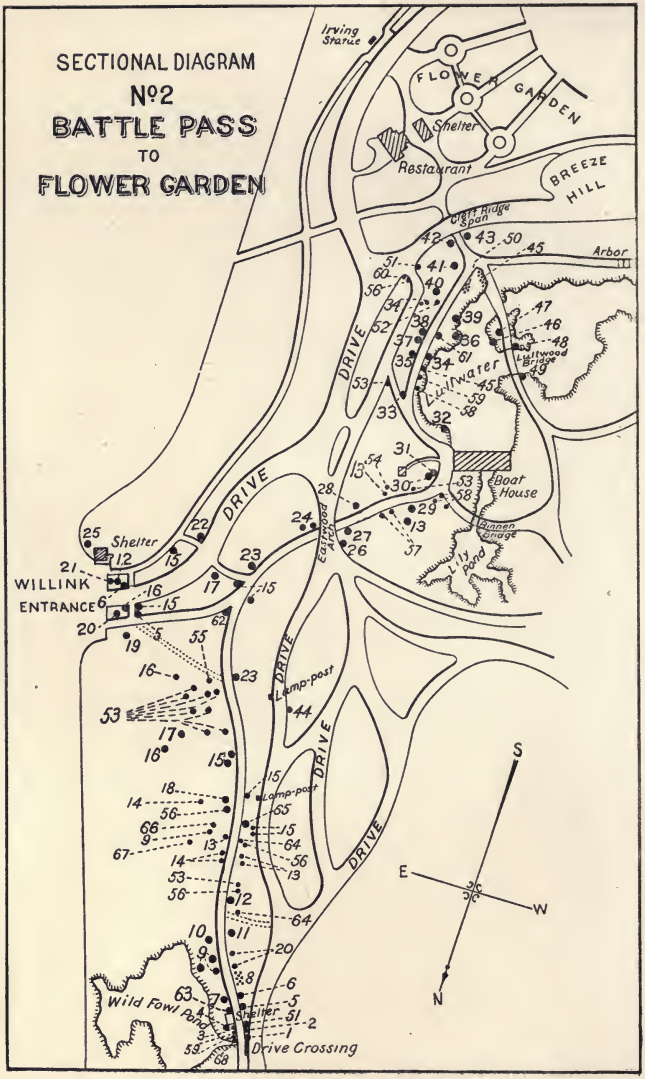
On the left you passed *Kœlreuteria* with its compound leaves of coarsely toothed leaflets; American white ash, tall and straight with lozenge-plated bark and compound leaves, pale green on the under sides; European silver linden, of sugar loaf form and cordate leaves, white on the under sides and dark glossy green on the upper sides; willow leaved European ash; ash-leaved maple easily distinguished by its pinnate leaves of from three to five leaflets, usually three and rarely seven; then two silver bell trees, known easily by their peculiarly marked bark, then a couple of spice-bushes; Californian privet, with glossy dark green oval leaves; and very near the point made by a junction of the path coming in from the left here, are a couple of handsome scarlet-fruited hawthorns. These you can know at once by their thorns and bright green, thin, smooth leaves of roundish ovate form, sharply lobed. The lobes are generally very regularly cut and give the leaves a very symmetrical look, but sometimes they vary greatly from this regularity of cut. These trees bloom profusely in May, and in September are loaded with their bright scarlet fruit, large, for hawthorns (about half

an inch), round or pear-shaped, and the birds get after them with a vengeance.

Back in the shrubbery, close by the border of the Pond, you will find a beautiful American beech, which you distinguish by its smooth light gray bark and chestnut-like leaves.

Close by the culvert that lets a tumbling stream into Wild Fowl Pond, you will find sassafras with its three different kinds of leaves; egg-shaped, mitten-shaped, double mitten-shaped, and a tall European or tree alder, which you will have no difficulty in finding if you look for its black last year's "cones" which are sure to be hanging on its branches. Its leaf, too, is decisive with a curved notch at the top.

This brings us to Wild Fowl Pond on the one side and the drive crossing back of Battle Pass on the other.


SECTIONAL DIAGRAM
No2
BATTLE PASS
TO
FLOWER GARDEN
Irving Statue
FLOWER GARDEN
Shelter
Restaurant
BREEZE HILL
Cleft Ridge Span
Arbor
Lullwood Bridge
Lullwater
Boat House
Binnen Bridge
Lily Pond
Eastwood Arch
DRIVE
Shelter
WILLINK ENTRANCE
Lamp-post
Lamp-post
Wild Fowl Pond
Shelter
Drive Crossing
S
E
W
N

Explanations, Sectional Diagram No. 2

Common Name	Botanical Name
1. Californian privet.	*Ligustrum ovalifolium.*
2. Cornelian cherry.	*Cornus mascula.*
3. Dotted fruited hawthorn.	*Cratægus punctata.*
4. Ash-leaved maple or box elder.	*Negundo aceroides.*
5. American hornbeam.	*Carpinus Caroliniana.*
6. European silver linden.	*Tilia Europæa, var. argentea.*
7. Kœlreuteria.	*Kœlreuteria paniculata.*
8. Syringa. (Various kinds).	*Philadelphus.*
9. Yellow-wood.	*Cladrastis tinctoria.*
10. European hazel.	*Corylus avellana.*
11. Common sweet pepper bush.	*Clethra alnifolia.*
12. European linden.	*Tilia Europæa.*
13. White oak.	*Quercus alba.*
14. English hawthorn.	*Cratægus oxyacantha.*
15. American chestnut.	*Castanea sativa, var. Americana.*
16. English elm.	*Ulmus campestris.*
17. Sweet gum or bilsted.	*Liquidambar styraciflua.*
18. Mockernut or white-heart hickory.	*Carya tomentosa.*
19. Colorado blue spruce.	*Picea pungens.*
20. Norway maple.	*Acer platanoides.*
21. Nordmann's silver fir.	*Abies Nordmanniana.*
22. Variegated Weigela.	*Diervilla rosea, var. foliis variegatis.*
23. Tulip tree.	*Liriodendron tulipifera.*
24. Spicebush.	*Benzoin benzoin.*
25. Bhotan pine.	*Pinus excelsa.*
26. Wild red cherry.	*Prunus Pennsylvanicum.*
27. Shady hydrangea.	*Hydrangea arborescens.*
28. Dotted fruited hawthorn.	*Cratægus punctata.*

Common Name	Botanical Name
29. Mugho pine.	*Pinus montana, var. Mughus.*
30. Laburnum, golden chain, or bean trefoil tree.	*Laburnum vulgare.*
31. Siberian pea tree.	*Caragana arborescens.*
32. Weeping bald cypress.	*Taxodium distichum, var. pendulum.*
33. Van Houtte's spiræa.	*Spiræa Van Houttei.*
34. English walnut.	*Juglans regia.*
35. White mulberry.	*Morus alba.*
36. Buttonbush.	*Cephalanthus occidentalis.*
37. Yellow flowered buckeye.	*Pavia lutea.*
38. Black haw.	*Viburnum prunifolium.*
39. French tamarisk.	*Tamarix Gallica.*
40. Japan pagoda tree.	*Sophora Japonica.*
41. Camperdown elm.	*Ulmus montana, var. Camperdownii pendula.*
42. Variegated English yew.	*Taxus baccata, var. elegantissima.*
43. Bhotan pine.	*Pinus excelsa.*
44. Dockmackie or maple leaved arrowwood.	*Viburnum acerifolium.*
45. Japan quince.	*Cydonia Japonica.*
46. Imperial cut-leaved European alder.	*Alnus glutinosa, var. laciniata imperialis.*
47. European hornbeam.	*Carpinus betulus.*
48. Black mulberry.	*Morus nigra.*
49. Scotch elm.	*Ulmus montana.*
50. Golden bell or Forsythia.	*Forsythia viridissima.*
51. English cork bark elm.	*Ulmus campestris, var. suberosa.*
52. Austrian pine.	*Pinus Austriaca.*
53. Cherry birch.	*Betula lenta.*
54. American beech.	*Fagus ferruginea.*
55. Sour gum, tupelo or pepperidge.	*Nyssa sylvatica.*
56. Black oak.	*Quercus coccinea, var. tinctoria.*
57. Hemlock.	*Tsuga Canadensis.*
58. Sycamore maple.	*Acer pseudoplatanus.*
59. English maple.	*Acer campestre.*
60. Sugar or rock maple.	*Acer saccharinum.*
61. Pin oak.	*Quercus palustris.*
62. Red maple.	*Acer rubrum.*

Common Name	Botanical Name
63. Washington thorn.	*Cratægus cordata.*
64. Silver maple.	*Acer dasycarpum.*
65. Mockernut or white-heart hickory.	*Carya tomentosa.*
66. European beech.	*Fagus sylvatica.*
67. Striped maple or moosewood.	*Acer Pennsylvanicum.*
68. Large thorned variety of the scarlet fruited hawthorn.	*Cratægus coccinea, var. macracantha.*

II.

BATTLE PASS TO FLOWER GARDEN.

Starting from the drive crossing at Battle Pass and following the Walk south, the first shrubs you will pass on your right are well grown bushes of Californian privet and Cornelian cherry *(Cornus mascula)*. The Cornelian cherry bears greenish yellow flowers, which are among the first to open in the spring. It belongs to the dogwood (*Cornus*) family, and its flowers, when fully out, bunch in clusters along its branches in a way that makes you think of "bachelor's buttons." The flowers develop in the summer to beautiful light yellow berries, which in the early fall change to shining scarlet. Further along, on the right again, are English cork bark elm, and about opposite the end of the Shelter over on the left of the Walk, is American hornbeam. The hornbeam can be identified by its bark alone—smooth, and often streaked with fine silvery lines. It is impossible to mistake its smooth, hard, muscular look, its clean-cut trunk and boughs with their swelling ridges which suggest bare muscles. There are many hornbeams in the Park, both native and European. The native hornbeam (*Carpinus Caroliniana*) is also called water-beech or blue-beech, and certainly the leaf is very much like both the beech and the birch, but more like the latter, how-

ever. The European hornbeam (*Carpinus betulus*) has a leaf very much like that of the cherry birch. You can tell the difference between the European and the native hornbeams by their seed clusters. The European is halberd shaped, the native, half halberd shaped.

About opposite the hornbeam on the other side of the path, close to the southern corner of the Shelter, is a pretty Washington thorn, and beyond it, a *Kœlreuteria,* and then some very beautiful yellow-woods (*Cladrastis tinctoria*), with fine, smooth, grayish bark, almost satin-like in the strong sunshine. They are goodly trees, well grown and healthy. You may know them by their long, compound leaves, made up of from seven to eleven oval leaflets. These trees are lovely sights in June when they are hung full of sweet smelling flowers, pure white, in long strings or racemes, very much like the flowers of the common locust (*Robinia pseudacacia*). Just beyond the yellow-woods is a well-grown European hazel (*Corylus avellana*), which is lace hung in spring, with dull rusty brown catkins that have a grace and beauty all their own. Indeed, I know of no fairer early spring sight than that of the lace-hung hazels vailing themselves while yet the trees are bare. About opposite the hazel, on the right of the path, you will find a noble growth of the sweet pepper bush (*Clethra alnifolia*). This gets its name, *alnifolia,* by the way, from its close resemblance to the alder (*Alnus*) leaf. The sweet pepper bush speaks for itself in July. Then it sends up little fingers of delicate frost-white bloom

so sweetly fragrant that bees, ants, and, seemingly, every kind of bug or insect, swarm to it and over it. The whole bush is then fairly alive with honey sippers. Beyond the *clethra,* on your right, you pass a fine European linden (*Tilia Europæa*), of excellent form, and beautiful, full leafage. This tree is also a veritable hive of insect industry when it is in bloom, which is in June. Then it is hung full of fragrant, starry, cream-colored flowers, which droop on stalks from leaf-life bracts. So fragrant are the flowers at night, that they fill all the air in the neighborhood of the trees on which they hang with a perfume that is almost heavy.

Now we have come to a point where the Walk makes a kind of double turn after the manner of Hogarth's line of beauty, into a glade or grove of tall and graceful trees that are truly majestic. You walk as through some open, unroofed temple whose columns are lordly oaks, stately chestnuts, straight strong hickories, graceful birches, towering sweet gums (*liquidambars*), with here and there set among them, in lowly modesty, young dogwoods reaching out to you over the Walk with most delicate, bewitching grace. Just before you pass into the shade of this hall of trees, notice the pretty clump of privet on the left, and just beyond it the little English hawthorns, which seem to stand so shyly at the portals where are assembled all these stately trees. Here are white oaks which are a glory in the winter sunshine with their light granite bark broken in plates and their bold and rugged fling of boughs filling the eye with joy at their

strength as they stand gnarled and knotted against the clear blue sky. Most of the white oaks here are the broad-leafed variety. There are many of the narrow-leafed variety in other parts of the Park (notably on Lookout Hill), but most of these here are of the broad leaf form, or widely ovate, broadest at the top. Here, too, are black oaks that glow with bronze when October walks through the Park. Here hickories sing their anthem of golden glory to the frosty winds, and here the sweet gums set fire to their starry leaves with flames of orange, crimson and richest blue-purple. But beautiful as this grove is in autumn, it has perhaps a more delicate beauty in spring. Don't fail to come here when the dogwood blooms in May. Then the Walk runs on under canopies of white which seem to float upon the air rather than to hang in it. On your right, passing along from the finely formed European linden of which we spoke just a little above, and which stands close by a short roadway from the path to the Drive, you will find a fine black oak standing a little to the south. A cherry birch stands just south of the black oak. Continuing on your right you pass two white oaks close together about opposite the two English hawthorns just spoken of, then black oak again, silver maple, a couple of American chestnuts by the Drive, mockernut hickory, and another chestnut not far from a lamp-post on the Drive.

Up to this point you have passed on your left, English hawthorn, white oak, striped maple (directly back to the northeast of the white oak), yellow-wood and European beech standing close to each other a little

to the east of the Walk, then black oak, and mockernut hickory about opposite the lamp-post on the Drive. To the east of the black oak and hickory, a few steps back, you will find another English hawthorn.

Continuing along the path to Willink Entrance you pass, in that delightful patch of wildwood which lies in between the Walk and the Drive, a wonderful host of small things which rise there every year to tell you it is spring. Here you will find wild sarsaparilla, spring beauties, jacks-in-the-pulpit, violets, wild geraniums, Solomon's seal, false Solomon's seal, and hundreds of others. Further along there are noble tulip trees (*Liriodendron tulipifera*) rising to majestic heights, and in June glorious sights when they are all hung full of chalice-like flowers, orange and green. These flowers make the seed "cones" of the tulip tree, so conspicuous in winter.

On the left, you have passed American chestnut, and quite a clump of cherry birches clustered together not far from a short foot-worn path striking diagonally across. Several fine English elms stand almost in line of each other, at wide distances, in a row parallel with the Walk. You can know them by their oak-like look and elm leaf.

If you follow the path on, it will lead you beneath Eastwood Arch, and on to the Boat House at Lullwater, but we are not quite ready to go down there yet, for a left hand branch, which breaks off here and runs out to the Willink Entrance has some lovely things to show us. On the way we pass English hawthorns, and beneath the wide-spreading boughs of

the English field elm (*Ulmus campestris*) easily recognized by its rather straight main shaft, by its somewhat horizontal manner of sending out its boughs. Indeed, as has been said above, the tree has an almost oak-like look, sturdy and thickset. Just beyond the English elm is one of the handsomest Norway maples in the Park. It is a glory in spring, when it is covered with delicate green flowers, and it is an equal glory in autumn when it is a hanging cloud of orange-yellow. On the left, near the Entrance, you will find a good little Colorado blue spruce (*Picea pungens*), and fine growths of the *Retinospora pisifera, var. squarrosa.* This variety of *Retinospora* is easily recognized by its soft, squarely setting leaf sprays, and by the light bluish-green cast of color in its foliage, delicately tinged with fine drifts of silver. In winter the shrub often takes on delicate copperish or reddish bronze tints, which are very beautiful through its silvery green.

Crossing the Drive and starting in again on the left-hand Walk of the Willink Entrance, notice the young Nordmann's silver fir on your right. It is a young tree, but beautifully formed, and it is growing finely. A little further on the path forks. Its left-hand branch keeps on straight ahead over a rise toward the Ocean Avenue Entrance, while the right bends around toward the Boat House. If you follow the Boat House path, you will pass, on your left, very near the drive crossing, great masses of variegated *Weigela,* with leaves of a mingled pale yellow and green, the borders of a light yellowish green. In

June, when these bushes are in bloom, they are beautiful indeed, and the perfume of their flowers is fragrance itself. Crossing the Drive you strike again the cathedral groves of chestnut, hickory, oak, sweet gum, tulip and birch. Squirrels are lively here, and it is here, in summer, that the goat carriages wheel their burdens of delighted children along the Walk. This part of the Park is a great haunt of the brown thrasher, and it is a satisfying thing to hear his liquid notes thrilling the soft air of a June day in these leafy glades.

Following this Walk toward the Boat House you will pass, on the right, straggling bushes of yew, *Mahonia Japonica,* rhododendrons, and on the left, near the Arch, spice-bush (*Benzoin benzoin*). This Arch, known as Eastwood Arch, is beautifully hung with the drooping golden bell or yellow jessamine (*Forsythia suspensa*). It may be interesting to add here that the *Forsythia* gets its name from an English botanist, W. A. Forsyth. For beauty of setting, this arch is one of the most picturesque in the Park. As you pass through it, you come out upon dogwoods and hawthorns, which lean out lovingly towards you from the banksides and when they are in bloom they make the place a fairyland of white. Just as you come from beneath the Arch, down at your right there is a pretty wild hydrangea (*Hydrangea arborescens*), which loves just the kind of a sheltered spot it has here. It has ovate or slightly cordate leaves, serrate and pointed and bears its white flowers in a flat cyme or head in June. Near it is a mass of wild purple-

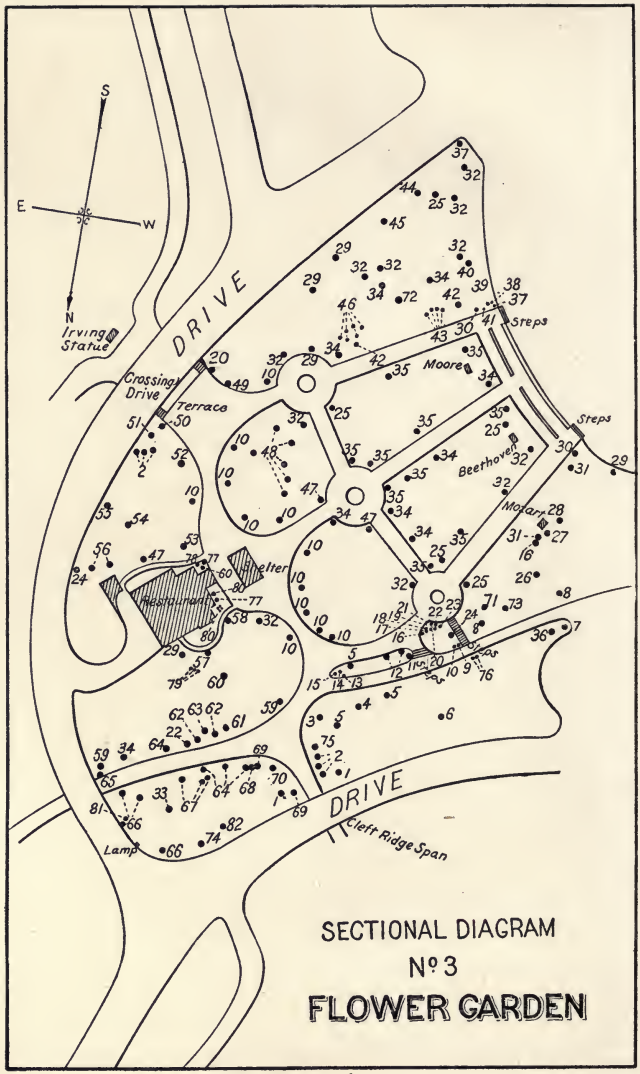
flowering raspberry (*Rubus odoratus*) which is covered in July or August with the beautifully tinted flowers which have given it its name. Higher up on the slope of the bank, by the roadside which runs over the Arch, a wild red cherry tree wreaths its bloom in May. Continuing, beyond the hydrangea, you will find some good hemlocks with fine and feathery leaf-sprays. Close by the border of the Walk are wild sarsaparilla and goodly white and scarlet oaks crown the ridges of the slopes. The yew, the *Rhododendron,* the *Azalea,* the *Mahonia,* the *Mugho pine* are here also, all on the right of the Walk, and a cluster of sycamore maples just in fork of the Walk where it sends off a branch toward the Music Stand. On the left of the Walk are beautiful flowering dogwoods (*Cornus florida*), which make this spot a special haunt of the camera enthusiast, and pretty dotted fruited hawthorns, a fine American beech, well up on the bank, cherry birches and more dogwoods. Just beyond this place the path forks again, the right running over a cozily set rustic bridge, hemlock shaded, to the Music Stand; the left-hand branch slipping easily down a little grade to the Boat House, and then running on again around the quiet stream here (well named Lull-water) to meet other walks which come together near Cleft Ridge Span, the Arch leading into the Flower Garden with its restaurant and goodly elms overshadowing.

Proceeding along the left-hand fork there is a fine laburnum or bean-trefoil tree (*Laburnum vulgare*) at your left, which is strung through and through in

June with the golden chains of bloom which have given it its common name, "golden chain." You meet this just before you come to the Boat House, and can easily identify it by its three clover-like leaves. Nestling almost beneath it is a pretty Siberian pea tree, which may be known by its leaves alone, made up of from four to six pairs of oval oblong leaflets. This is the *Caragana arborescens.* Its flowers are yellow, and they appear in May. Beyond the Boat House there are many things to claim your attention. This Walk, as stated above, leads along by the side of the stream. On your right, close down by the water's edge, rears up a lofty weeping bald cypress (*Taxodium distichum, var. pendulum*) of spire-like form and soft feathery foliage. Further along are large growths of barberry, loaded in late May or early June with clusters of yellow flowers which develop in September into the beautiful cool-looking crimson berries that are a delight to the eye all through the autumn and remain on the bushes in good part through the winter. Beyond are sycamore maple. English maple, Japan quince, with rich crimson flowers in May; English walnut on the bank where the water comes in close to the Walk; *Forsythia* with golden bell-like flowers in late April or early May; pin oak with its tiny acorns and back of it by the water, buttonbush (*Cephalanthus occidentalis*), in blossom in June; smoke tree *(Rhus cotinus),* French tamarisk (*Tamarix Gallica*) and *Forsythia* and *Deutzia crenata.* On your left you have passed great clumps of *Spiræa Reevesiana; Spiræa Van Houttei,* white

mulberry; a graceful yellow-flowered buckeye *(Pavia lutea)* with yellow flowers in May or June; black haw (*Viburnum prunifolium*) and Austrian pine.

Upon the slope of the hill, back of the Austrian pine you will find some more English walnuts. Further on, along the Walk, and back on the slope is a fine Japan pagoda tree with locust-like foliage. As you round the turn of the Walk to go under the Arch (Cleft Ridge Span) a remarkable tree of spreading habit and dwarf umbrella form meets you. It is very conspicuous with its wide-reaching drooping branches. This is the Camperdown elm and is exceedingly picturesque in summer or winter. Its leaf with its long points and rough surface marks its kinship with the Scotch elm *(Ulmus montana)*. Just beyond the Camperdown, near the Arch, are masses of *Taxus baccata, var. elegantissima* (variegated English yew), beautiful sights in early June when their new shoots of golden-yellow tuft out all over them. Just as you go under the Arch look up on your right and see a handsome Bhotan pine hanging its tassels high up on the bank. This brings us to the Flower Garden.


S
E
W
N
Irving Statue
DRIVE
Crossing Drive
Terrace
Moore
Steps
Steps
Beethoven
Mozart
Restaurant
Shelter
DRIVE
Cleft Ridge Span
Lamp
SECTIONAL DIAGRAM
Nº 3
FLOWER GARDEN

Explanations, Sectional Diagram No. 3

Common Name	Botanical Name
1. Camperdown elm.	*Ulmus montana, var. Camperdownii pendula.*
2. Forsythia or golden bell. (With leaves intermediate between the bush, *viridissima,* variety and the weeping, *suspensa,* variety).	*Forsythia intermedia.*
3. Shrubby Wistaria. (Pale purple flowers).	*Wistaria frutescens.*
4. Flowering dogwood.	*Cornus florida.*
5. Japan maple.	*Acer polymorphum.*
6. Austrian pine.	*Pinus Austriaca.*
7. European flowering ash.	*Fraxinus ornus.*
8. Black walnut.	*Juglans nigra.*
9. Cornelian cherry.	*Cornus mascula.*
10. American or white elm.	*Ulmus Americana.*
11. Day lily.	*Hemerocallis fulva.*
12. Weeping European silver linden.	*Tilia Europœa, var. argentea* (or *alba*) *pendula.*
13. Hornbeam-leaved maple.	*Acer carpinifolium.*
14. Colchicum-leaved maple.	*Acer lætum.*
15. Japan snowball.	*Viburnum plicatum.*
16. European English yew.	*Taxus baccata.*
17. Cephalonian silver fir.	*Abies Cephalonica.*
18. Japan ground cypress or Japan arbor vitæ. (Pea-fruiting).	*Chamœcyparis* or *Retinospora) pisifera, var. aurea.*
19. Irish juniper.	*Juniperus communis, var. Hibernica.*
20. Irish yew.	*Taxus baccata, var. fastigiata.*
21. Polish juniper.	*Juniperus communis, var. Cracovia.*
22. Swiss stone pine.	*Pinus Cembra.*
23. Chinese arbor vitæ.	*Thuya Orientalis.*
24. Hemlock.	*Tsuga Canadensis.*
25. Sycamore maple.	*Acer pseudoplatanus.*

Common Name	Botanical Name
26. Kentucky coffee tee.	*Gymnocladus Canadensis.*
*27. Cunninghamia.	*Cunninghamia Sinensis.*
28. White pine.	*Pinus strobus.*
29. European linden.	*Tilia Europæa.*
30. Slender Deutzia.	*Deutzia gracilis.*
31. Chinese podocarpus.	*Podocarpus Sinensis.*
32. Norway maple.	*Acer platanoides.*
33. Small mockernut hickory.	*Carya microcarpa.*
34. American basswood.	*Tilia Americana.*
35. Sugar or rock maple.	*Acer saccharinum.*
36. European ash.	*Fraxinus excelsior.*
37. Japan quince.	*Cydonia Japonica.*
38. Ghent azalea. (Variety Bryant.)	*Azalea Sinensis.*
39. Japan ground cypress or Japan arbor vitæ (Plume-leaved).	*Chamæcyparis* (or *Retinospora*) *pisifera, var. plumosa.*
40. European holly.	*Ilex aquifolium.*
41. Japan aucuba.	*Aucuba Japonica.*
42. Lovely azalea.	*Azalea amœna.*
43. Mountain laurel.	*Kalmia latifolia.*
44. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
45. Weeping European silver linden.	*Tilia Europæa, var. argentea* (or *alba*) *pendula.*
46. Rhododendrons. Various kinds, mostly of the *Everestianum* (lilac flowers) variety.	
47. Tulip tree.	*Liriodendron tulipifera.*
48. Adam's needle.	*Yucca filamentosa.*
49. English cork bark elm, grafted on stock of slippery elm.	*Ulmus campestris, var. suberosa* on stock of *Ulmus fulva.*
50. Scotch elm. (Grafted on stock of slippery elm).	*Ulmus montana,* on stock of *Ulmus fulva.*
51. Weeping Japan pagoda tree.	*Sophora Japonica, var. pendula.*
52. Copper beech.	*Fagus sylvatica, var. cuprea.*

* Cut down while MS. was going through press. Some saplings from it are coming up near its stump

Common Name	Botanical Name
53. Umbrella pine.	*Sciadopitys verticillata.*
54. Purple-leaved sycamore maple.	*Acer pseudoplatanus, var. purpurea.*
55. Various-leaved European linden.	*Tilia Europœa, var. heterophylla.*
56. Norway spruce.	*Picea excelsa.*
57. Blue willow.	*Salix alba, var. cærulea.*
58. Teas's weeping mulberry or Russian weeping mulberry.	*Morus alba, var. Tartarica.*
59. Silver maple.	*Acer dasycarpum.*
60. Weeping Chinese lilac. (Flowers in large white panicles, about middle of June).	*Syringa, var. Pekinensis pendula.*
61. Kilmarnock weeping willow.	*Salix capræa, var. pendula.*
62. Gregory's Norway spruce.	*Picea excelsa, var. Gregoryiana.*
63. Double red-flowering peach.	*Prunus Persica vulgaris, var. flora sanguinea plena.*
64. Kœlreuteria.	*Kœlreuteria paniculata.*
65. Spicebush.	*Benzoin benzoin.*
66. Mockernut or white-heart hickory.	*Carya tomentosa.*
67. European flowering ash.	*Fraxinus ornus.*
68. Weeping English yew.	*Taxus baccata, var. pendula.*
69. Japan pagoda tree.	*Sophora Japonica.*
70. Japan ground cypress or Japan arbor vitæ. (Variety *squarrosa.*)	*Chamæcyparis* (or *Retinospora*) *pisifera, var. squarrosa.*
71. Deodar or Indian cedar.	*Cedrus Deodara.*
72. Garden azalea.	*Azalea mollis.*
73. American white ash.	*Fraxinus Americana.*
74. Crisp-leaved European ash.	*Fraxinus excelsior, var. atrovirens.*
75. Weeping golden bell or Forsythia.	*Forsythia suspensa.*
76. Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
77. Garden hydrangea.	*Hydrangea hortensis.*
78. Dwarf Japan catalpa.	*Catalpa Bungei.*
79. Japan Judas tree.	*Cercis Japonica.*

Common Name	Botanical Name
80. Panicled hydrangea. (Large flowered.)	*Hydrangea paniculata, var. grandiflora.*
81. Shellbark or shagbark hickory.	*Carya alba.*
82. Sassafras.	*Sassafras officinale.*

III.

FLOWER GARDEN.

Starting at Cleft Ridge Span, the Arch leading from the quiet Walk beside Lullwater into the Flower Garden, you come out upon the loveliness of this beautiful spot. With its picturesque Restaurant bowered in masses of rhododendron and sheltered by lindens and elms it is a most delightful place to loiter in. As you come in from the Arch you pass, on your right great masses of the *Forsythia intermedia* and *suspensa.* These bushes are among the handsomest of the *Forsythia* in the Park and every spring are loaded with beautiful four petalled yellow flowers. Higher up on the bank, just above the first bushes of the *Forsythia* nestles another Camperdown elm reaching down to you with the exquisite grace of its slender drooping branches, in its own peculiar umbrella-like manner.

If you wish to see a handsome effect in crimson come here in early autumn when the masses of Indian currant *(Symphoricarpos vulgaris)* that plume the ridge of the Span have burst into flame. Beyond the *Forsythia* is Japan maple *(Acer polymorphum),* with finely cut star-like leaves and delicate blood-crimson flowers in small clusters in spring. In autumn the leaves of this tree turn a beautiful cool crimson after most of the trees have passed their glory of color and

it stands by the Arch a lingering torch amid the bared trees.

On the bank beyond the Japan maple stands a dogwood glorious in early spring when it rolls back its pin head flower buds and opens its white bracts, laying them on the air in a miracle of floating bloom. Its flowers are bunched in the center of the white bracts. We are now on the Walk which leads up to the top of Breeze Hill and the "Old Fashioned Flower Garden," but we will not go up there yet, for we have something to see on the opposite side of the Walk. Nestling in behind the myrtle border, hidden by the growths of dwarf Japan maples, azaleas, and young rhododendrons, you will find the Colchicum-leaved maple (*Acer Lætum*) which has a very beautiful leaf with a faintly heart-shaped base and from five to seven lobes. Near it and behind it is the peculiar hornbeam-leaved maple *(Acer carpinifolium)* with leaves almost exactly like those of the hornbeam itself. The only difference in the leaves of the two trees, so far as I can see, is that the maple leaf is a little thicker of texture. The similitude is certainly striking.

As you turn around and come back to the Flower Garden, at the edge of the turn, there are some very fine Japan snowballs *(Viburnum plicatum),* noteworthy for their beautifully ridged leaves of roundish shape and pointed. They are called *plicatum,* because the leaves have a crimped or folded appearance. The *Viburnum tomentosum,* of which the *plicatum* is a variety, has a similar leaf, less roundish, more elliptic and long acuminate. They are beautiful shrubs and

carry great balls of clustered flowers, pale Nile green at first, then changing to white at maturity.

If you keep to the right, the Walk will lead you around by the south-eastern slope of Breeze Hill and it is this course we now take. Just beyond the *Viburnum plicatum* is a very handsome Japan maple *(Acer polymorphum)* with small star-shaped leaves. This is a tree of considerable size, but all around the border near it, you will find many varieties of Japan maples, most of them small shrubs, two, three, and four feet high. Among them you will find the cut-leaved *(Acer polymorphum, var. dissectum);* the purple cut-leaved *(Acer polymorphum, var. dissectum atropurpureum)* with very delicate, finely cut leaves. This last is fairy-like in its fineness, its leaves hanging in the most delicate filaments. A little further along nestles the snowberry shaded by the over-arching glooms of beautiful weeping European silver lindens. Back of the snowberry, with bending lance-like leaves which make you think of thick sedge grass, lies a rich, cool bank of *Hemerocallis* or day-lily which shows orange-hued flowers in the summer. This brings us to a flight of stone steps which ascends to the Walk leading to the top of Breeze Hill. We shall not go up, but will keep on, following the right hand border of the Walk.

Almost the first thing to greet you, beyond the steps, is a European or English yew (*Taxus baccata*) with dark green foliage and ragged trunk. The leaves of the yew are noticeably pointed and droop somewhat like damp feathers. A little back and beyond the yew is a tall evergreen of broad base and conical top. This

is a Cephalonian silver fir *(Abies Cephalonica)* and may be known by its stiff brush-like leaf sprays and sharply pointed needles. Some elegant specimens of this fir you passed on the first chapter's ramble, near Vale Cashmere. Back of the Cephalonian silver fir, up the slope of the hill are graceful hemlocks.

Close by the border of the Walk again you pass Japan ground cypress of the variety *pisifera* and a little further along, very near the corner of the border of the Walk where a couple of steps drop to a small circle of path, you will find Polish juniper. It has been pruned until it is almost a stump, but its foliage is healthy. It varies from our common juniper in its dense, crowded, close-growing stiffer leaves, which are very silvery on the upper sides. If you go down these few steps and follow the arc of the path to the second flight of steps up Breeze Hill, close by the corner you will find Chinese arbor vitæ and by it a well clothed Swiss stone pine. The pine you can easily identify by its leaves in bundles of five. About halfway up the flight of steps to Breeze Hill, close by the steps, is another hemlock, and at the top of the steps, by its right hand corner, is Cornelian cherry. Beside the Cornelian cherry, to the right of it, stands an American elm. Directly in front of the top of the steps are two bushes of nine-bark. On the left of steps, along the path leading into Old Fashioned Flower Garden, are black walnut, American white ash, and black walnut again near the spot where the path opens out into the Old Fashioned Flower Garden. Opposite this black walnut are European flowering ash and Eu-

ropean ash. Note the differences of these last two trees.

Come back now to the point where we left the Flower Garden, at the foot of the second flight of steps and follow the arc of the walk border toward the Lake. Right in the corner of the border is sycamore maple and back of it about half way up the hill, is a small *Cedrus Deodara* or Indian cedar with beautiful light glaucous green, larch-like leaves. Passing on, south-westwards, following the Walk, when you come about opposite the bust of Mozart, if you go over to it and look at the evergreen that stands just behind it you will find a very interesting thing to study. It is the *Cunninghamia Sinensis* and gets its name from the botanical collector, J. Cunningham, who discovered its species in China about 1700. It is certainly a beautiful conifer (cone-bearer), with long sweeping leafsprays which give the tree something of a palm-like look. Go up and examine its leaves, for they are very handsome. These leaves are fully two inches long, flat and pointed at the tip. From the tip they gradually widen as they approach the stem, to which they are attached in a peculiar way which botanists term *decurrent*, that is, running along the stem beyond the point of fastening. Near the *Cunninghamia*, north of the Mozart Statue is a little evergreen shrub with an appearance very much like that of the Irish yew. It is the Chinese *Podocarpus* and its leaves are linear-lanceolate and very noticeably decurrent.

In this vicinity the rhododendrons are very handsome. Come here in June when they are in their

glory. The dark crimson flowered is the "John Waterer," the crimson, the "H. W. Sargent," the rosy lilac, the "Everestianum," the cherry red, "Charles Bagley." In the beautiful corner at the end of the Flower Garden, very near the steps leading to the sycamore or plane tree grove, are lovely masses of *Deutzia gracilis,* very beautiful when in flower in late May or June.

If you cross now to the east side of the Garden, and, beginning at its south-east corner, walk toward the Restaurant, you will pass Japan quince, Ghent *Azalea* variety Bryant with yellow flowers in May, Japan *Aucuba* with splashed and spotted leaves, slender *Deutzia,* and the lovely *Azalea amœna,* with magenta-crimson flowers in April. Mountain laurel is here and European holly and rhododendrons, in glorious bursts of bloom in June. Back of all these, like a mighty green wall rise the green towers of magnificent Norway maples, American basswoods and lindens, and back of these, along the Drive, European lindens, European silver lindens, and weeping European silver lindens.

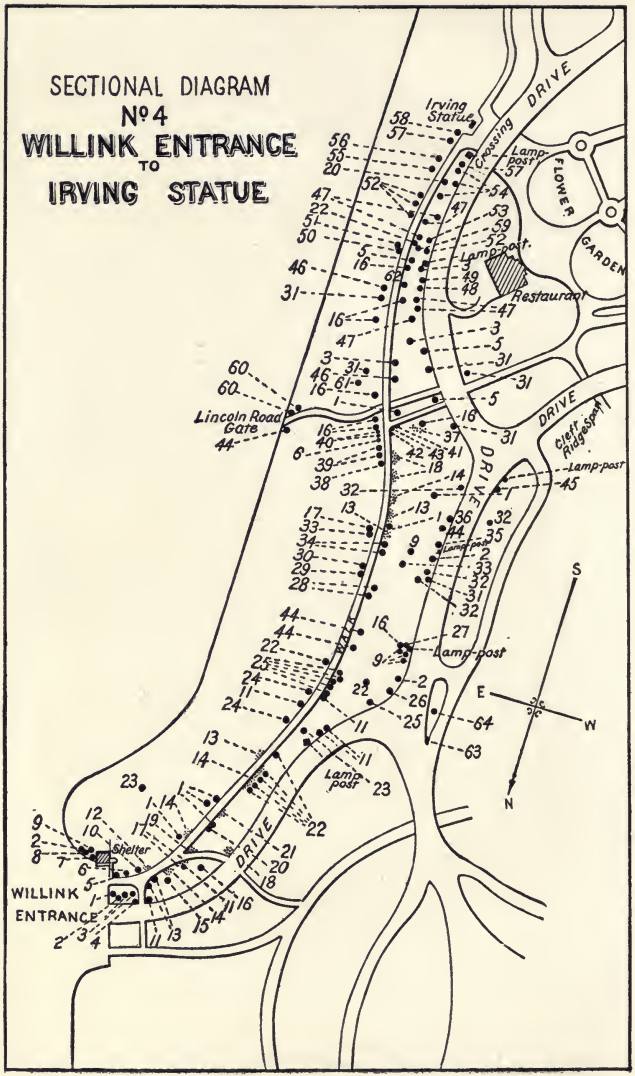
Now we have come to a spot where seats, facing the Drive, are placed in rows beneath rustling lindens and elms. The spot is dear to the heart of the park visitor and on a fine day when the driving is good, not a seat is empty. The parade of fashion goes by, the golden air whispers to the leaves overhead, the birds carol unseen in the boughs, and cares and troubles are forgotten. Behind this lovely spot is an ornamental stone urn filled with the pretty *bellis* daisy and azaleas. Passing on, we come to the terrace with

its effective stone work. The face of its wall is covered with *Euonymus radicans, var. variegata.* Back of this place the velvet lawns are gracefully set with choice things. Here is a handsome Teas's weeping mulberry, and, in spots, clump the spike-like leaves of the *Yucca filamentosa,* or Adam's needle, which send up straight shafts from their midst, in mid-summer. At the top of the shaft its bloom breaks forth in great heads of white flowers. Majestic American elms guard the upper edge of this lawn in a kind of half ring and they seem to have been just the right trees to set off the foliage of the basswoods, silver lindens, tulip trees, Norway maples, sugar maples, English field maples and sycamore maples which fill this lovely spot with their shifting shadows and whispering music.

About the Restaurant itself, the beautiful things gathered there are too numerous to give in detail. We can point out only a few. On the right, as you face it there is a fine copper beech with rich copper colored leaves and a Scotch elm grafted on the stock of *Ulmus fulva,* near the terrace wall. Near the path at the right-hand end of the Restaurant you will find the beautiful little Japan parasol tree or umbrella pine (*Sciadopitys verticillata*) with leaves in whorls of thirty to forty at the extremities of the branches. Here, too, are many *Retinosporas,* among them a very handsome *squarrosa.* Clustered about the eastern end of the Restaurant, close by it, are garden hydrangea, dwarf Japan catalpa and weeping Chinese lilac. On the left of the Restaurant, close by it, are panicled hy-

drangea, garden hydrangea and panicled hydrangea again. Close by the little path on the left of the Restaurant is a handsome Teas's weeping mulberry, which you may know by its mitten-like leaves so characteristic of the mulberry. Over by the border of the lawn, about half way along the Walk toward the driveway, you will find another weeping tree, which at a distance closely resembles that of the Teas's weeping mulberry. But it is quite different when you look at its leaves. This is the Kilmarnock weeping willow, and it is a graft on the stock of the goat willow (*Salix caprea*), as its leaves show. If you have any doubts about its being a willow, come here early in spring and see its little "pussies" scattered all along its stems. Near the Kilmarnock willow is a beautiful double red-flowering peach tree. Its bloom is something glorious, breaking forth in early May into bursts of rich carmine-tinted flowers. Catch these with the afternoon sunshine illuminating them and you will have a sight that will be with you many a day. Further along on the Walk are *Picea excelsa, var. Gregoryiana,* a low cushion-like variety of the Norway spruce, known at once by its form, which makes you think of the pictures of Eskimo huts in the geographies. Follow along here and you pass Swiss stone pine, *Kœlreuteria,* and American basswood (tall and finely grown), and at the point where the Walk meets the Drive at your right is a spice bush (*Benzoin benzoin*) with a silver maple just behind it. If you turn back again now and walk toward the Arch (Cleft Ridge Span) you pass a row of three hickories, the far one being small mockernut;

then several European flowering ashes, all easily known by their short, squat trunks, gray brittle-looking branches and compound leaves. Here, too, just beyond the flowering ashes, are more Kœlreuterias, weeping English yew and well-grown *Sophora Japonica* (one just at the bend of the border, another close to the Arch, on the right hand side). The *Sophora Japonica* is an exceedingly interesting tree, and you meet it all over the Park. It is well, therefore, to learn it early. It belongs to the great pulse family, *Leguminosæ,* as its flowers and fruit show; has greenish bark and compound leaves which by the beginner are often mistaken for those of the locust. In August this tree puts forth its bloom—great bunches of yellowish white flowers, which later develop into glossy green string-like pods that show very conspicuously. As you pass the last *Sophora,* the Walk bends in sudden graceful curve to the right toward the Cleft Ridge Span and just around its corner you meet a very handsome *Retinospora squarrosa.* Its soft, silvery green foliage is very beautiful, and it is rising in an exquisitely symmetrical cone. At one time I thought this shrub was surely going to die, but it has recovered its vitality, and since I have known it has almost doubled its height. Beyond it and up the bank is another Camperdown elm, and close beside the top of the Arch another *Sophora.*


SECTIONAL DIAGRAM
Nº 4
WILLINK ENTRANCE
TO
IRVING STATUE
Irving Statue
Passing DRIVE
Lamp-post
FLOWER
GARDEN
Restaurant
DRIVE
Lincoln Road Gate
Cliff Ridge Spot
Lamp-post
Shelter
WILLINK ENTRANCE
S
E
W
N

Explanations, Sectional Diagram No. 4

Common Name	Botanical Name
1. Tulip tree.	*Liriodendron tulipifera.*
2. Nordmann's silver fir.	*Abies Nordmanniana.*
3. European linden.	*Tilia Europæa.*
4. European silver linden.	*Tilia Europæa, var. argentea.*
5. Sycamore maple.	*Acer pscudoplatanus.*
6. Ash-leaved maple or box elder.	*Negundo aceroides.*
7. Bhotan pine.	*Pinus excelsa.*
8. Colorado blue spruce.	*Picea pungens.*
9. Austrian pine.	*Pinus Austriaca.*
10. English elm.	*Ulmus campestris.*
11. American chestnut.	*Castanea sativa, var. Americana.*
12. Large flowered syringa.	*Philadelphus grandiflorus.*
13. Thunberg's barberry.	*Berberis Thunbergii.*
14. Van Houtte's spiræa.	*Spiræa Van Houttei.*
15. Japan plum.	*Prunus triflora.*
16. Red maple.	*Acer rubrum.*
17. Pearl bush.	*Exochorda grandiflora.*
18. Variegated Weigela.	*Diervilla rosea, var. foliis varicgatis.*
19. Mock orange or sweet syringa.	*Philadelphus coronarius.*
20. American hornbeam.	*Carpinus Caroliniana.*
21. Lilac.	*Syringa vulgaris.*
22. Cherry birch.	*Betula lenta.*
23. Red oak.	*Quercus rubra.*
24. Choke cherry.	*Prunus Virginiana.*
25. Flowering dogwood.	*Cornus florida.*
26. Paper or canoe birch.	*Betula papyrifera.*
27. Swiss stone pine.	*Pinus Cembra.*
28. Common locust.	*Robinia pseudacacia.*
29. Red-flowering dogwood.	*Cornus florida, var. rubra.*
30. Camperdown elm.	*Ulmus Montana, var. Camperdownii pendula.*
31. Silver maple.	*Acer dasycarpum.*

Common Name	Botanical Name
32. White oak.	*Quercus alba.*
33. Mockernut or white-heart hickory.	*Carya tomentosa.*
34. English hawthorn. (Pink double flowers.)	*Cratægus oxyacantha.*
35. American white ash.	*Fraxinus Americana.*
36. Scarlet oak.	*Quercus coccinea.*
37. Japan snowball.	*Viburnum plicatum.*
38. Witch hazel.	*Hamamelis Virginiana.*
39. Fragrant honeysuckle.	*Lonicera Fragrantissima.*
40. Californian privet.	*Ligustrum ovalifolium.*
41. Golden bell or Forsythia.	*Forsythia viridissima.*
42. Purple barberry.	*Berberis vulgaris, var. purpurea.*
43. Common barberry.	*Berberis vulgaris.*
44. Black oak.	*Quercus coccinea, var. tinctoria.*
45. Pignut hickory.	*Carya porcina.*
46. Broad-leaved European linden.	*Tilia Europæa, var. platiphylla.*
47. Norway maple.	*Acer platanoides.*
48. English cork bark elm.	*Ulmus campestris, var. suberosa.*
49. American or white elm.	*Ulmus Americana.*
50. Siberian pea tree.	*Caragana arborescens.*
51. Yellow-wood.	*Cladrastis tinctoria.*
52. Norway spruce.	*Picea excelsa.*
53. Hemlock.	*Tsuga Canadensis.*
54. English field maple.	*Acer campestre.*
55. American white or gray birch.	*Betula populifolia.*
56. Hop tree or shrubby trefoil.	*Ptelea trifoliata.*
57. Kœlreuteria.	*Kœlreuteria paniculata.*
58. European beech.	*Fagus sylvatica.*
59. Black cherry.	*Prunus serotina.*
60. Black walnut.	*Juglans nigra.*
61. Shellbark or shagbark hickory.	*Carya alba.*
62. American bassword.	*Tilia Americana.*
63. Sassafras.	*Sassafras officinale.*
64. European or tree alder.	*Alnus glutinosa.*

IV.

WILLINK ENTRANCE TO IRVING STATUE.

In this article we start at Willink Entrance, left hand path, and, passing the things about this entrance described in chapter two, proceed to a point where the path forks into two branches, the right running over to the Boat House, the left keeping straight on and parallel with Ocean Avenue. We take the left and go south.

Just beyond the fork, at your left, are dense masses of the beautiful *Spiræa Van Houttei,* which in June and early July are covered with clusters of white flowers in heads that hang in almost bursting profusion along their drooping, slender branches. When they are in full bloom they seem like fountains of foam stilled to sudden silence, pictures of frozen froth. The *Spiræa Van Houttei* is very much like its sister, the *Spiræa Reevesiana,* but its leaf is shorter (rhombic-ovate) and rounded at the base; whereas, the leaf of the *Reevesiana* is more lance-like (lanceolate). In habit of growth the *Van Houttei* is arching and drooping, whereas the *Reevesiana* is more bush-like in character. As these are the more widely used spiræas in the Park, it is well to note their differences.

This is a beautiful section of the Park where we are now. Here the tulip trees lift up the magnificent

towers of their strength; here the chestnuts unfold the glory of their leaves; here the dogwoods star the path with bloom, here the birches hang the golden lace of their flowering catkins, decking them as with fairy vails. Here the violets spread their tender blue, lovely to look upon, flushing the plushy grass. Here the peabody bird sends out his clear sweet call in the leafless days of early spring, and here the squirrel threads his trembling highways, while the breezes come and go through the whispering trees, speaking of woodlands and the solace of green things, gently waving to every breath of air.

Beyond the *Van Houttei* on the left of the Walk, and close to it, there are two majestic tulip trees, which look as if they might be twin columns of what was once some noble forest Parthenon, and just beyond them you will find (on the right) more bushes of the *Spiræa Van Houttei.* Back of these are a row of cherry birches. On the left, as you pass along, about diagonally opposite the *Van Houttei* is a good clump of the pretty Thunberg's barberry and a choke cherry just beyond it. At this point you ought to be about opposite a lamp-post on the Drive; and about midway between you and the post is a fine red oak (*Quercus rubra*). A little further on, are American chestnut and then several dogwoods close together. Here it will be worth your while to cut across to the Drive for a moment and have a look at the things on edge of its bank, as it bends to go south. Here is a beautiful white canoe birch and almost on the point of the turn a good

Nordmann silver fir. Just south of the Nordmann you will find a clump of three Austrian pines bunched close together very near a lamp-post. The little conifer just south-east of the lamp-post is not Austrian pine, but Swiss stone pine (*Pinus Cembra*).

Let us now come back to the path again and continue on south. At about the crest of the rise, on your right, you will find black oaks, two fairly near together, tall, strong, majestic. You can know them by their hard, dark, grayish bark, and strong, close ridges. Beyond, you pass common locust *Robinia pseudacacia,* just over the brow of the rise, as the path begins to descend. A little further on, if you are walking in dogwood days, you will have a treat indeed in the little clump of red-flowering dogwood (*Cornus florida, var. rubra*). There are several of them here, on the left of the Walk, and they are very dainty and delicate, with beautiful rose-red flower bracts rolled back in all their tender loveliness. Just beyond these dogwoods you meet the peculiar Camperdown elm with its umbrella shape, several of which you have already seen over by Cleft Ridge Span. You can't mistake this tree and it will serve as a landmark to find the things about it. Almost opposite to it, in about the middle of the grassy slope, between you and the Drive, is a fine mockernut hickory (*Carya tomentosa*) and a little below the hickory on the slope still, is a goodly Austrian pine, which will serve as another landmark. Just across from the Austrian pine, just west of it on the very edge of the Drive is an excellent young Nordmann's silver fir. Coming

back to the Walk again below the Camperdown elm and directly opposite the Austrian pine just spoken of are two lovely little pink double flowered English hawthorns (*Cratægus oxycantha, var. flore pleno*). They are beautiful things to see in May. Don't miss them. Below these, you meet close to the Walk, on the left, another mockernut hickory with tall straight trunk so characteristic of the hickory, and very close to it, hiding just behind it to the south-east you will find the beautiful *Exochorda grandiflora* or pearl bush, cultivated from China for its large white flowers, which have spoon shaped petals, and come out in long axillary racemes in May or June. It is a very beautiful shrub and gets its name from the Latin *exo,* external and *chorde,* a thong, referring to the structue of the fruit. Opposite the *Exochorda* on the right of the Walk and close by its border is Thunberg's barberry (*Berberis Thunbergii*). This barberry is very widely used in the Park and it is well to get to know it early. It is a dainty shrub, with fine delicate brittle leaves and grows low. But for all its daintiness it has plenty of spikes and very sharp they are as you will find if you get too familiar with it. It nestles here in two large clumps on either side of a majestic tulip tree, and these clumps are joyous sights in late autumn especially if you come upon them on a bright frosty sunshiny day all sparkling with the jewels of their rich red berries. Into these bushes the autumn winds tearing over the slope drive the flying leaves in shoals and the little Thunbergs seem to give them restful shelter from their roaming and for reward

for coming to them hang rubies all about them. But we must say a word about the mighty tulip that rises so majestically here. It is one of the handsomest tulip trees in the Park and magnificently set, especially if you see it from a point a little further along on the Walk. It rises on its straight columnar trunk and flings out its branches like a giant stretching his mighty arms. Come here and see it when it sets the blazonry of its seed "cones" against the clear blue of the winter's sky. Pure white they gleam in the sunshine, a joy to your eye, thrilling you through and through with their beauty.

Over by the Drive almost directly west of this noble tulip tree, you will find a very handsome black oak and just south of it, along the Drive, a good specimen of scarlet oak.

Coming back to the Walk again, you pass, below the stretch of Thunberg's barberry, great masses of the *Spiræa Van Houttei* which in June are foaming fountains of white bloom and further along, still on your right, are clusters of the variegated *Weigela* which, in June also, are laden with beautiful funnel form flowers so fragrant that their perfume is almost overpowering. How the bees love them. They crawl into their fairy crypts and go to sleep, rocked in their pearly walls as in a cradle, swaying with the gentle zephyrs of June. On the left of the Walk, just below the *Weigela* are fragrant honeysuckle (*Lonicera fragrantissima*) bushes covered in very early spring with sweet smelting frost-white flowers softly tinged with yellow. Below the honeysuckle bushes

are clumps of Californian privet and set in between the privet and the honeysuckle is a lovely ash-leaved maple which leans out over the Walk, and, in early spring, (April), drapes its boughs with the fairy reddish lace of its flower clusters. In its blooming the ash-leaved maple is the very essence of grace and loveliness. Very close to the *fragrantissima* and about opposite the second clump of *Weigela,* you will find witch hazel. Try to see it in the autumn when it sets all its tiny yellow ribbons of bloom fluttering in the air. You can know it by its oval lop-sided leaves. All these are on the left of the Walk. On the right, about opposite this point, are masses of common and purple barberry and *Forsythia viridissima,* at the bend of the cross walk which leads over to the Flower Garden. Just back of these there are magnificent clumps of Japan snowball (*Viburnum plicatum*) which in late May or June are hung heavily with great balls of white bloom.

Now you have come to a second cross path, one end of which (the left) runs out to a little swing gate opposite Lincoln Road, the other leads across the Drive to the Flower Garden. Close by the little swing gate are two stalwart black walnuts. Keeping on straight ahead almost opposite the carriage way to the rear of the Restaurant, almost in the middle of the grassy bank on your right, rises a European linden (*Tilia Europea*) of the true type, with fine leaves delicately cut and long sweeping drooping lower branches. This tree has the true dusky smoky black of the European linden. A little further, directly oppo-

site the Restaurant's driveway is a fine Norway maple and there are more of them right around it here. Close beside the driveway, further on, not far from a lamp-post, you will find, English cork-bark elm (*Ulmus suberosa*) which you can know at once by its heavy cork-ridged limbs and rugged trunk. The tree has a rough, tough expression which you can easily get to know on sight. Lamp-posts are good landmarks and very near to the one here, just east of it, close by the Walk, is a fine sycamore maple (*Acer pseudo-platanus*). It gets its name from a resemblance of its leaves to those of the common buttonball (*Platanus*), "false-platanus." Compare the leaves of the two trees. On the opposite side of the Walk, a little below the sycamore maple you will find the pretty Siberian pea tree (*Caragana arborescens*) with its leaflets in pairs and yellow flowers when in bloom and, below the Siberian pea, stands a yellowwood. Opposite the Siberian pea tree, on the right of the Walk is a black cherry (*Prunus serotina*) which you can pick out at once by its rough, scaly bark. Its bark makes you think something of the Kentucky coffee tree, but the coffee tree excels it in roughness. On the border of the Drive a little south and west of the black cherry is a small hemlock, with its fine and feathery foliage waving a pleasing contrast. There is always a forest glint about the foliage of the hemlock. Opposite the hemlock is Norway maple, and another just south, near the border of the Drive. Then come a few English field maples (*Acer campestre*) with short sturdy

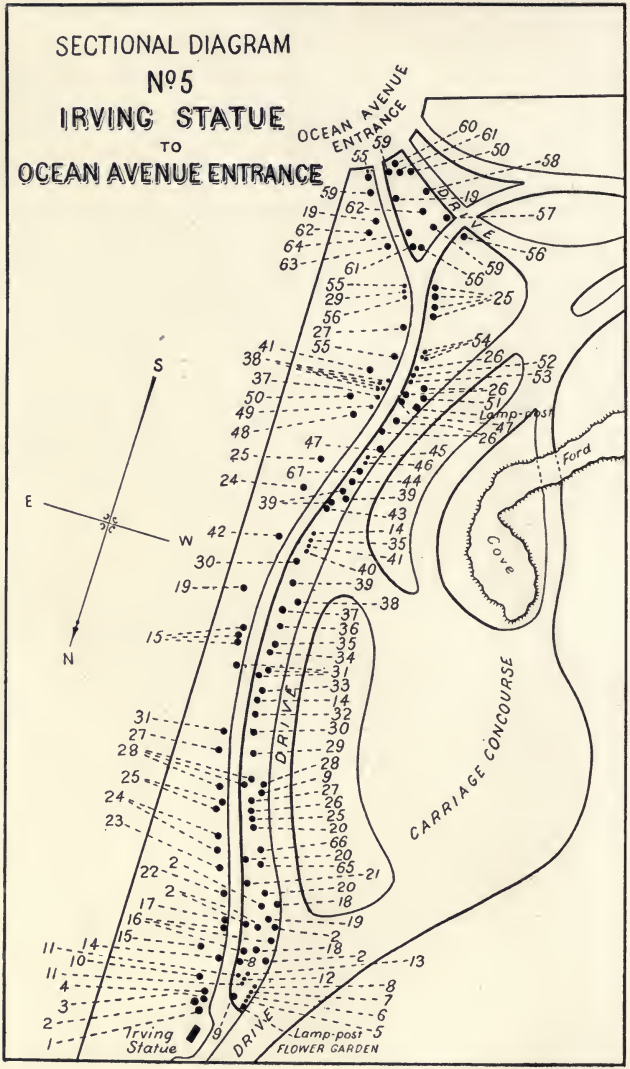
trunks and branches thrown squarely out from the shoulder. The bark of these is rough and tough like the bark of the English elm. The tree has much the look of a Norway maple and especially so at the time of bloom, for its flowers are corymbiform like those of the Norway and have very much the same appearance. But they are of a duller green. The leaf of the English maple has a squarish, bluntish cut, is rather small and usually five lobed. In general, it looks like a smaller edition of the leaf of the Norway maple, with lobes trimmed short and rounded. It is a sturdy stocky tree and one you grow to love dearly. You are now very near the Irving Statue and the Drive crossing. Just before you come to the crossing, a few feet in front of the lamp-post which stands on the extreme turn of the Walk, on the edge of the border, you come to a tree which it is well to get to know early in your rambles for you meet it all over the Park. It is not a large tree, and grows generally with a rather round-headed form, "all head and shoulders." It is the *Kœlreuteria paniculata* from China and takes its name from Kœlreuter, a German botanist. You may easily know it by its pinnate leaves made up of about a dozen coarsely toothed leaflets. In early July this tree bears great clusters of handsome yellow flowers which at once mark it from afar. These flowers ripen quickly into strange looking bladdery pods which are very conspicuous and very queer looking objects to the eye that knows them not. They are especially noticeable in autumn. This particular *Kœlreuteria* before us now stands, as has been said,

almost at the end of the right hand bank of the Walk, just where the Walk meets the Drive to cross over to the terrace wall of the Flower Garden.

To go back a moment, notice about opposite the hemlock and the Norway maple which you passed just above, the fine yellow-wood with its smooth branches and long compound leaves. You can pick out a yellow-wood almost by the look of its bark, a smooth slate gray, not quite so light and plump as the beech nor so silvery as the silver linden but nevertheless very smooth and satin-like to the eye, especially in winter. Its leaves are compound, alternate and odd-pinnate with the bases of the petioles hollow. The leaves are made up of from seven to eleven oval or ovate leaflets about three to four inches long and are of a beautiful light green color. The flowers of the yellow-wood are very dainty and pretty and hang in long drooping panicles of pure white in late June or early July with something of the fragrance of the common locust's flowers. The flowers develop into pods about two inches long and are ripe in August.

About opposite the *Kœlreuteria*, on your left, as you walk on south, you pass an interesting bush with its leaves in threes. It is the *Ptelea trifoliata,* the hop tree or shrubby trefoil. It gets its name *Ptelea* from its fruit, which is elm-like, *ptelea* being Greek for elm. Its fruit is wafer like, and does indeed look very much like the samara of the elm, but on an enlarged scale. This shrub blooms in June with greenish white flowers in terminal heads or cymes and these in turn develop into conspicuous clusters of

wafer-like fruit with broad winged margins notched a little at the ends. There are many of these shrubs in the Park and quite a number of them are of the golden leaved variety, with bright yellow leaves in early spring and summer. Beyond the *Ptelea,* on the same side of the Walk, you will find another *Kœlreuteria* and beyond the *Kœlreuteria,* European beech. This brings us to the Irving Statue, directly opposite the Flower Garden.


SECTIONAL DIAGRAM
No 5
IRVING STATUE
TO
OCEAN AVENUE ENTRANCE
OCEAN AVENUE ENTRANCE
DRIVE
CARRIAGE CONCOURSE
Lamp-post
Ford
Cove
Irving Statue
Lamp-post
FLOWER GARDEN
S
E
W
N

Explanations, Sectional Diagram No. 5

	Common Name	Botanical Name
1.	Single-leaved European ash.	*Fraxinus excelsior, var. monophylla.*
2.	European beech.	*Fagus sylvatica.*
3.	Swiss stone pine.	*Pinus Cembra.*
4.	Reeve's spiræa. (Double flowered).	*Spiræa Reevesiana, var. flore pleno.*
5.	Black or pear hawthorn.	*Cratægus tomentosa.*
6.	Reeve's spiræa. (Single flowered).	*Spiræa Reevesiana.*
7.	Van Houtte's spiræa.	*Spiræa Van Houttei.*
8.	European flowering ash.	*Fraxinus ornus.*
9.	Shadbush, June berry, or service berry.	*Amelanchier Canadensis.*
10.	Fragrant honeysuckle.	*Lonicera fragrantissima.*
11.	Weigela.	*Diervilla amabilis.*
12.	Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
13.	Striped maple or moosewood.	*Acer Pennsylvanicum.*
14.	Fringe tree.	*Chionanthus Virginica.*
15.	Hemlock.	*Tsuga Canadensis.*
16.	Yellow-wood.	*Cladrastis tinctoria.*
17.	Weigela.	*Diervilla amabilis.*
18.	Paper or canoe birch.	*Betula papyrifera.*
19.	Norway spruce.	*Picea excelsa.*
20.	American white ash.	*Fraxinus Americana.*
21.	Hop tree or shrubby trefoil.	*Ptelea trifoliata.*
22.	Judas tree or redbud.	*Cercis Canadensis.*
23.	Red cedar.	*Juniperus Virginiana.*
24.	Pyramidal variety of American arbor vitæ.	*Thuya occidentalis, var. pyramidalis.*
25.	Oriental spruce.	*Picea Orientalis.*
26.	Black haw.	*Viburnum prunifolium*
27.	Silver maple.	*Acer dasycarpum.*
28.	Red maple.	*Acer rubrum.*

Common Name	Botanical Name
29. Norway maple.	*Acer platanoides.*
30. Flowering dogwood.	*Cornus florida.*
31. European linden.	*Tilia Europæa.*
32. Broad-leaved European linden.	*Tilia Europæa, var. platiphylla.*
33. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
34. Weeping European silver linden.	*Tilia Europæa, var. argentea* (or *alba*) *pendula.*
35. Bridal wreath spiræa.	*Spiræa prunifolia.*
36. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
37. Cucumber tree.	*Magnolia acuminata.*
38. Umbrella tree.	*Magnolia umbrella.*
39. Sycamore maple.	*Acer pseudoplatanus.*
40. Arrowwood.	*Viburnum dentatum.*
41. Tulip tree.	*Liriodendron tulipifera.*
42. Austrian pine.	*Pinus Austriaca.*
43. Fly honeysuckle.	*Lonicera xylosteum.*
44. Bristly locust.	*Robinia hispida.*
45. Silver bell or snowdrop tree.	*Halesia tetraptera.*
46. False indigo.	*Amorpha fructicosa.*
47. Washington thorn.	*Cratægus cordata.*
48. Chinese quince.	*Cydonia Sinensis.*
49. English elm.	*Ulmus campestris.*
50. Kentucky coffee tree.	*Gymnocladus Canadensis.*
51. Black cherry.	*Prunus serotina.*
52. Choke cherry.	*Prunus Virginiana.*
53. English hawthorn.	*Cratægus oxyacantha.*
54. Weigela.	*Diervilla amabilis.*
55. Ash-leaved maple or box elder.	*Negundo aceroides.*
56. Sycamore maple.	*Acer pseudoplatanus.*
57. Sassafras.	*Sassafras officinale.*
58. White pine.	*Pinus strobus.*
59. Flowering dogwood.	*Cornus florida.*
60. Persimmon.	*Diospyros Virginiana.*
61. American hornbeam.	*Carpinus Caroliniana.*
62. Cherry birch.	*Betula lenta.*
63. Broad-leaved European linden.	*Tilia Europæa, var. platiphylla.*

Common Name	Botanical Name
64. Broad-leaved European linden.	*Tilia Europæa, var. platiphylla.*
65. Kœlreuteria.	*Kœlreuteria paniculata.*
66. English field maple.	*Acer campestre.*
67. Lilac. (White flowers.)	*Syringa vulgaris, var. alba.*

V.

IRVING STATUE TO OCEAN AVENUE ENTRANCE.

In this ramble we start at the Irving Statue, opposite the Flower Garden, and walk south to Ocean Avenue Gate. Along this Walk there are many interesting things to see.

Just below the Statue, at the left of the Walk, as you face south you find the queer single-leaved ash (*Fraxinus excelsior, var, monophylla*). It is queer, because, as a rule, ash trees have compound leaves. You can know it at once by its thick, rough, heavy looking bark. A glance at this alone gives you the hint of its kinship with *Fraxinus*. Try to see it in the early spring, when it sends out little spurts of fine purplish bloom, peculiar sights on its bare branches, looking very much like small tufted plumes. Below the single-leaved ash is a handsome European beech, easily known by its smooth gray bark, and wavy, hairy margins of its leaves which are not toothed. Below the beech is a good sized young Swiss stone pine (*Pinus Cembra*). This tree is doing well here and in winter is very handsome with its rich dark green, lightened a little by the glaucous bloom on its leaves. If you examine the leaves of this tree you find that they are clustered five in a fascicle and are distinctly three

sided in shape. Cut a leaf across and you have a perfect triangle.

On the right of the Walk, close beside the Drive and just back of the lamp-post there, you will find a well grown hawthorn, very handsome in May, with abundant white flowers, in showy heads. It is the black or pear hawthorn, (*Cratægus tomentosa*). Near it, but overarching the Walk is the interesting shadbush (*Amelanchier Canadensis*) or June berry. It blooms in late April and tips up its little white, cherry-like blossoms in racemes at the ends of its branches, before the leaves are fully out. They are very dainty and fairy-like and sights you love to see when so many limbs are bare and wintry looking. The *Amelanchier,* speaking of winter, has a mark by which you can know it afar off. Once get in your eye its silvery gray bark marked with fine streaking lines and you will never forget the shadbush. To the right of the shadbush, near the Drive are European flowering ashes (*Fraxinus ornus*) easily picked out by their short squat trunks, brittle, grayish branches and compound leaves. The leaflets have their edges crinkled and curled. Passing on, we come to masses of *Weigela,* covered in June with sweet smelling rose-pink flowers. Back of the masses of *Weigela,* half hidden by them, a young striped maple (*Acer Pennsylvanicum*) lifts up its slender stretch of bark which it is worth while to stop and look at. Do you see those pretty fine lines striping it so gracefully. From these it gets its common name. Its leaves are broad, three lobed, with beautiful, long pointed tips.

But the best sight the striped maple has to show is its bloom. Try to catch it in late April or early May, when it is letting down its lovely fairy-like racemes of tenderest green. It is then the very essence of grace and delicacy. The leaf of the striped maple has a decided goose-foot look. Beyond the striped maple are European beech (note its tender leaves with edges entire, frilled with delicate hairs) and European flowering ash again.

A few feet further along, on the right of the Walk we meet a yellow-wood, and back of the yellow-wood, about half way toward the Drive is a white paper or canoe birch (*Betula papyrifera*). As there are several varieties of white birch near here, it is a good place to note their distinguishing features. The canoe or paper birch has long, ovate, taper-pointed, heart-shaped leaves; the American white or gray birch has triangular shaped leaves, very conspicuously taper pointed and very truncate at their broad bases. This is the *Betula populifolia* or poplar leaved birch. If you know the leaf of the Lombardy poplar you will see the significance of this name. Another white birch, very frequent in the Park is the European white birch, *Betula alba,* with rather deltoid leaves and, in the cut-leaved variety, *laciniata,* very beautifully in-cut. These are the usual varieties of the white birch in the Park and you can tell them at once by their leaves. The canoe birch, at its best, has a brilliant chalky white bark, a very beautiful specimen of which you will find near the Plaza Entrance, described in the first chapter of this book.

But, to go on, we find some more yellow-woods and then three very beautiful European beeches. Compare their soft, toothless leaves with those of our own beech. Our own is strongly toothed, and looks like a broadened form of the chestnut leaf. Then we come to Norway spruce, sparse and thin, not doing very well for some reason and then to a lusty paper birch, side by side with European beech. Next to these we have a good tall American white ash and beyond the ash, hop tree (*Ptelea trifoliata*). Then come *Kœlreuteria,* American ash again, (close beside the Walk) with its strongly individualized bark, and then sturdy English maple (*Acer campestre*). If you should happen to see an English maple bloom don't mistake it for a Norway maple, as I have frequently known people to do. It has its flowers in a corymb like that of the Norway maple but its green is darker. Look at the leaves. They will set you right. A little open stretch follows and we come to American ash again. Just beyond, indeed almost beside it, we meet an evergreen which at once arrests attention by its beautiful dark green short blunt leaves. If you look at its bark you will see that it is dashed and splashed with grayish-white. This grayish-white is resin and the tree is a fine specimen of Oriental spruce (*Picea Orientalis*). It is distinctly conical in form and you can tell it by this shape, and by its blunt, short, dark green needles scarcely half an inch long.

Up to this point, easily marked by the conical form of the Oriental spruce, you have passed on your left, beginning at the Irving Statue, single leaved ash, Eu-

ropean beech, Swiss stone pine, double flowered *Reeve spiræa* (very handsome in July), fragrant honeysuckle *(Lonicera fragrantissima)* and fringe tree *(Chionanthus Virginica)*, opposite the yellow-wood. We must stop here to say a word about the fringe tree. If ever a thing botanical was well named, this is. Come and see it in flower in June when it is draped through and through with beautiful fringe-like bloom, so purely white, that it has won its other name *Chionanthus* from the Greek words for snow and blossom. The white petals are an inch long and very slender. The fruit of the tree is a blue purple berry which the birds love dearly. Beyond the fringe tree and considerably to its left, standing quite alone in a lovely open space, where in June it is knee deep in waving grasses, stands a graceful young hemlock. It stands so conspicuously alone, you cannot mistake it. The hemlock is to me a tree full of grace and loveliness. Every breeze that blows moves its fine fingering branches which flutter tenderly and seem to reach for the passing breeze and play with it as with living fingers. If you go near to it, when the breeze is whispering to it, how delicate is the music of its leaves.

Passing on, along the Walk we meet another fine yellow-wood, with antler-like growth of branches, smooth and clean cut of limb, a delight to the eye. Beyond the yellow-wood a burst of *Weigela* will welcome you with lovely pink and white corollas if you ramble here in June and, considerably along the path, about opposite a European beech, is the stump of a Judas tree. It was once a beauty but disasters of

winter, ice and sleet and whistling winds have not left much of it. As you go on south, you come to three tall spire-like trees, with their tops a little bent from the perpendicular. The first is a red cedar, the other two, southward, are American arbor vitæ of the variety "pyramidalis" (*Thuya occidentalis, var. pyramidalis*). Their tops were bent by ice storms. I passed them one winter not long ago after an ice storm had swept the Park with its lovely beauty but awful havoc and these three trees were bowed, as if in prayer, their heads bent almost to the ground, glittering with ice-jewels, but almost ready to crack apart. When the sun came with its silent golden hammers and broke the fettering ice, they lifted, but they never regained the straight minaret-like spires of their former days. Just beyond these three trees you come to two more Oriental spruces, known at once, as has been said, by their dark green masses of foliage, short, blunt needles, conical forms and resin painted trunks. They stand just a few feet south of their handsome kinsman on the other side of the Walk.

Let us come back now to this very tree where we left off and follow the path southwards, noting the things on the right hand side until we come to a point that cannot be mistaken. Then we will come back again and note the things on the left of the Walk.

We start with the Oriental spruce on the right of the Walk. Nestling close behind the conifer, like a shy young girl behind her grandfather, peeps out a dainty little black haw (*Viburnum prunifolium*) with oval, smooth, finely-cut leaves. In May it is covered

with flowers in flat-topped clusters and in September it is hung full of blue black sweet berries. In form it looks like a hawthorn but you will not find any thorns on it. Not far from the black haw a good sized silver maple flings over the Walk the dancing shade of its finely cut leaves. The silver maple has become so common as a street tree in cities that many pass it by with but little notice. Yet what a beautifully cut leaf it has. Close to the silver maple stands a red maple. You will know it by its three pointed or lobed leaf. There are several of these red maples very close together here and very beautiful they are in early spring, when their boughs are covered with dainty crimson flowers. Then you can see and know them afar off. A little further along stands a fine Norway maple, equally handsome in spring when it sets its brilliant green corymb-like flowers in an almost uncontrollable burst of bloom all over its branches. Then come dogwood, so lovely in May, and European linden of the broad-leaved variety, (*Tilia Europæa, var. platyphylla*), then a well grown fringe tree and then a plump silver linden (*Tilia Europæa, var. argentea* or *alba*) with well defined sugar-loaf form, light ashen gray or mouse gray, smooth bark, and large cordate or sub-orbicular leaves, smooth dark green on top, but very white and silvery on the undersides. You cannot mistake this tree. Its limbs spring out from the trunk low down. It is a very handsome tree and when the wind plays with its large silvery leaves, the whole tree fairly burns with life and light. Beyond you will find the pendulous variety

of this species of European silver linden, with leaves noticeably shorn off sharply on one side. The next larger tree on this side of the Walk is European silver linden again, and in between the two silver lindens, is a lovely specimen of the bridal wreath spiræa (*Spiræa prunifolia*). This spiræa bears white wreath-like flowers, hanging four or five together in little bunches or umbels all along the gracefully bending stems. It blooms in late April or early May. Beyond the silver linden is cucumber tree (*Magnolia acuminata*), easily known by its pale green, thin leaves, pointed at both ends, and from five to ten inches long. Its fruit grows to resemble a small sized cucumber, whence its name. This fruit is very conspicuous in early autumn, showing crimson through its leaves at quite a distance. Not far from the cucumber tree, closer down to the Drive is an umbrella tree and as these trees are often mistaken for each other, it is a good place to note how different they are, as they stand here almost side by side. The umbrella tree is *Magnolia umbrella* and has very large paddle-shaped leaves from one to two feet long. They grow clustered together at the ends of the branches and hang down in a very umbrella-like way. The tree's habit of growing its leaves in this manner has given it its common name. Its bark has the magnolia look, but the bark of the cucumber tree is almost elm-like in character. Looking at its bark alone you would never think it to be a magnolia. The cucumber tree has pale yellowish-green flowers and the umbrella tree white flowers. Both bloom some time in May. Beyond

the cucumber tree is a fine sycamore maple, then dogwood, and then an excellent tulip tree which in June loads itself with handsome chalice-like flowers, greenish yellow. Nestling close beside the tulip is a beautiful clump of arrowwood (*Viburnum dentatum*) with leaves exquisitely cut (*dentatum*) all round their margins. You will know it by its saw-cut leaves. This tulip tree stands about directly opposite the open space of the Drive which leads into the "Carriage Concourse."

Up to this point, you have passed on the left beginning at the spot where the Oriental spruces stand close together, about opposite the handsome one on the right of the Walk mentioned above;—red maple, silver maple (opposite Norway maple), European linden (*Tilia Europæa*), opposite dogwood, European linden again (opposite two fine trees of the same kind). Notice the dusky, smoky look of its bark and the almost sooty black of its branches. Then come three rather scrawny specimens of hemlock, one after the other. For some reason they do not seem to be doing very well. They stand about opposite the bridal-wreath spiræa. Norway spruce, thin and scant of leaf, stands about opposite the sycamore maple, and Austrian pine about opposite the handsome tulip spoken of above.

Now let us go along from the tulip tree again, continuing south, noting the things on the right of the Walk. Just beyond it is bridal-wreath spiræa again, then fringe tree and then a soft leaved honeysuckle with yellow-white flowers in late May or early June. This is *Lonicera xylosteum* and its flowers are

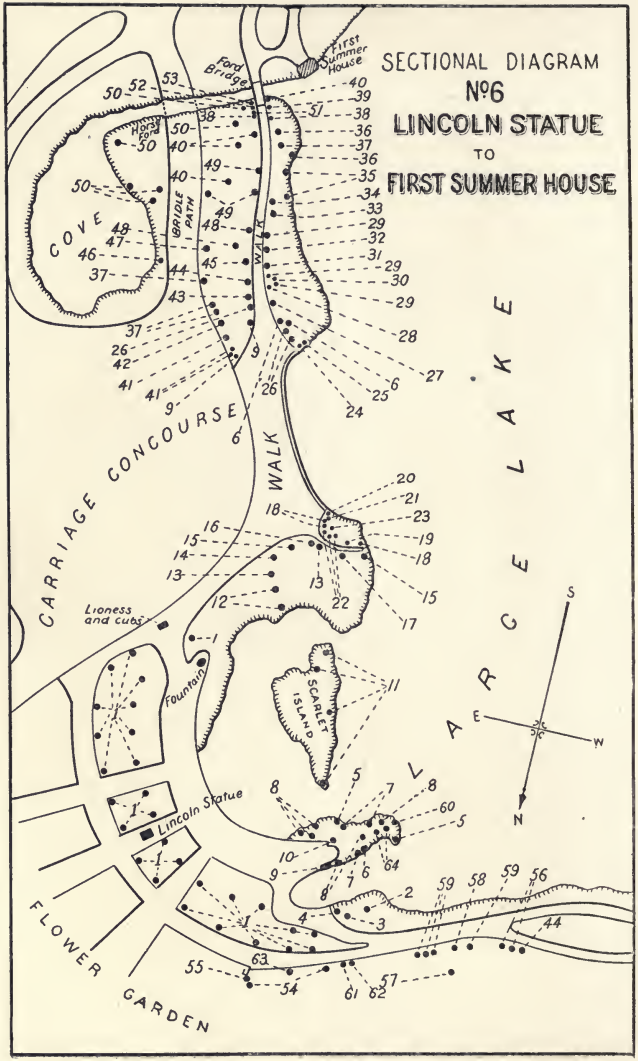
often slightly tinged with red. They are two lipped and the upper lip (the broad one) is four-notched. Its leaf is broadly oval, of a dull green, very pubescent when young, but gets smooth later on. It is about from one to three inches long. This bush bears dark red berries. The flowers are white at first but soon change to yellow. Just beyond this honeysuckle you come to a cluster of three sycamore maples, fine trees all of them, with large, splendidly developed leaves. You remember this sycamore maple has leaves very much like the American buttonwood. From this resemblance it gets its botanical name *pseudo*—(false) and *platanus* (plane tree or buttonwood). The flowers of the sycamore maple are very curious looking things. They come soon after the leaves appear, in long, pendulous cone-shaped racemes of dull green. They are quite conspicuous and you cannot fail to see them if you are near the tree at its flowering time. These racemes soon develop into close clusters of fruit called "keys" or "samaras." The leaf of the sycamore maple is thick and coarse of texture, cordate, with five lobes crenately toothed and always on noticeably reddish stems or petioles. The fruit hangs on the tree long after the leaves fall in the autumn. After the sycamore maples you meet a bush of rambling sprawling branches and locust-like leaves. It is the bristly locust (*Robinia hispida*) and beyond it is a well grown clump of lilac which decks itself gorgeously in May with white flowers. Next to the lilac is *Amorpha fructicosa,* of the great *Leguminosæ* or pulse family and in late May or early June sends out deep

violet, indigo flowers clustered in terminal spikes. Its common name is false indigo. Beyond this bush is a little halesia or snow-drop tree with which you no doubt have already become well acquainted. Try to see the halesia in early spring. At that time it seems the very essence of spring itself, and its pearly white flower bells with their hanging clapper-like pistils, seem to ring out "purity, purity, purity," through the leafing trees from all their silent little bells. There is a music that is soundless and that is the music of a flower to the eye. Such music bells the halesia in spring. But you can know it when it is not in bloom by its bark, which is distinctly marked with longitudinal lines. Its leaves are very soft and velvety, oblong egg-shape, from two to four inches in length, and finely serrate. If it be in fruit, you can surely know it by its seed which is distinctly four-winged;—hence its name *Halesia tetraptera,* (*tetra,* Greek for four and *ptera,* wing). As we go along, we meet, still on the right, a young Washington thorn (*Cratægus cordata*) with small leaves very noticeably triangular in form. It blooms in middle or late May with terminal corymbs of white flowers which develop into small scarlet berries in September. These hang upon the tree late into the winter and they are cheery, glowing sights when all the paths are stilled with the driven snow. As you go on south two pretty young black haws lean out over the Walk to you. The second is very near a lamp-post that stands by the Drive. This will show you where you are. Just beyond the lamp-post is black cherry (*Prunus serotina*) with

smooth green leaves and rugged bark. Then two more black haws and then a pretty English hawthorn (*Cratægus oxyacantha*) with smooth, obovate leaves deeply cut in at the lobes and distinctly wedge shaped at the base. This also bears white flowers in May. But, although there are many white flowered English hawthorns in the Park, there are also many which bear single and double pink, and crimson flowers. Beyond the English hawthorn is choke cherry (*Prunus Virginiana*), then black haw again and then a cluster of beautiful pink and white flowered *Weigela,* (*Diervilla amabilis*). Further on, that you may know the spot, you pass several Oriental spruces, one after the other. About here, the Walk bends around to meet the Drive, and at its very corner is a fine sycamore maple.

Going back now to the tulip tree opposite the point where the Drive opens into the Carriage Concourse, and following south again, noting the things on the left of the Walk, you pass Austrian pine (opposite bridal wreath spiræa); Pyramidal arbor vitæ (opposite sycamore maple); Oriental spruce (opposite lilac and amorpha); Chinese quince (*Cydonia Sinensis*) opposite the two black haws which stand just north of the lamp-post by the Drive. This is a peculiar tree and worth noticing. It looks in winter as if it might be a hornbeam. It bears beautiful pink flowers in spring and has thick finely serrate roundish leaves, almost leathery in texture. Beyond the Chinese quince, is English elm, then, close to the Walk a cucumber tree. Back from the Walk is a good sized Kentucky coffee tree, tall, rather Y-form in habit of branching,

with rough, scaly bark and leaves twice pinnately compound. Its flowers are greenish-white and show conspicuously in panicles at the ends of its branches, appearing usually in June. Then we come to cucumber tree again and then to several umbrella trees clustered close together. Beyond the umbrella trees, back from the Walk, is tulip tree and beyond, close to the Walk, ash-leaved maple. The next tree along the path is silver maple, then sycamore maple, Norway maple, ash-leaved maple, broad-leaved European linden, cherry birch, Norway spruce, flowering dogwood and ash-leaved maple at the end of the Walk on the left just as you go out to Ocean Avenue. In the little section made by the fork of the path with the Drive you will find an interesting tree close by the fence, about midway between the path and the Drive. It is the persimmon tree (*Diospyros Virginiana*) and in September when the frosty sparkling days come you will see its yellow globose berries about an inch long, showing plainly on its branches. The frost ripens the berries. This brings you to Ocean Avenue, but before you go home take a look at the large leaved maple trees that have been set along the sidewalk. They are rich crimson in early spring when they leaf. They are Schwedler's maples, varieties of the Norway maple.


SECTIONAL DIAGRAM
№6
LINCOLN STATUE
TO
FIRST SUMMER HOUSE
First Summer House
Ford Bridge
Horse Ford
COVE
BRIDLE PATH
WALK
CARRIAGE CONCOURSE
WALK
Lioness and cubs
Fountain
SCARLET ISLAND
Lincoln Statue
FLOWER GARDEN
LAKE
S
E
W
N

Explanations, Sectional Diagram No. 6

	Common Name	Botanical Name
1.	Oriental plane tree.	*Platanus Orientalis.*
2.	Yellow birch.	*Betula lutea.*
3.	Hackberry or sugar-berry.	*Celtis Occidentalis.*
4.	European hornbeam.	*Carpinus betulus.*
5.	American basswood.	*Tilia Americana.*
6.	Tulip tree.	*Liriodendron tulipifera.*
7.	European or tree alder.	*Alnus glutinosa.*
8.	Umbrella tree.	*Magnolia umbrella.*
9.	American or white elm.	*Ulmus Americana.*
10.	Soulange's magnolia.	*Magnolia Soulangeana.*
11.	Indian bean or southern catalpa.	*Catalpa bignonioides.*
12.	Norway spruce.	*Picea excelsa.*
13.	European larch.	*Larix Europæa.*
14.	Austrian pine.	*Pinus Austriaca.*
15.	Scotch pine.	*Pinus sylvestris.*
16.	European flowering ash.	*Fraxinus ornus.*
17.	Kœlreuteria.	*Kœlreuteria paniculata.*
18.	Japan quince.	*Cydonia Japonica.*
19.	Variegated Weigela.	*Diervilla rosea, var. foliis variegatis.*
20.	Judas tree or red bud.	*Cercis Canadensis.*
21.	American white or gray birch.	*Betula populifolia.*
22.	Golden bell or Forsythia.	*Forsythia viridissima.*
23.	Weeping European larch.	*Larix Europæa, var. pendula.*
24.	American hornbeam.	*Carpinus Caroliniana.*
25.	American hornbeam.	*Carpinus Caroliniana.*
26.	Oleaster.	*Elæagnus angustifolia.*
27.	Ash-leaved maple or box elder.	*Negundo aceroides.*
28.	Mock orange or sweet syringa.	*Philadelphus coronarius.*

Common Name	Botanical Name
29. European larch.	*Larix Europæa.*
30. Large-flowered syringa.	*Philadelphus grandiflorus.*
31. Red maple.	*Acer rubrum.*
32. European bird cherry.	*Prunus padus.*
33. European hazel.	*Corylus avellana.*
34. American hornbeam.	*Carpinus Caroliniana.*
35. Weeping European silver linden.	*Tilia Europæa, var. argentea* (or *alba*) *pendula.*
36. Red maple.	*Acer rubrum.*
37. Cherry birch.	*Betula lenta.*
38. Bush Deutzia.	*Deutzia crenata.*
39. American hornbeam.	*Carpinus Caroliniana.*
40. Norway maple.	*Acer platanoides.*
41. Hop tree or shrubby trefoil.	*Ptelea trifoliata.*
42. Black cherry and cherry birch grown together.	*Prunus serotina* and *Betula lenta*
43. Black haw.	*Viburnum prunifolium.*
44. Weeping bald cypress.	*Taxodium distichum, var. pendulum.*
45. American white ash.	*Fraxinus Americana.*
46. American hornbeam.	*Carpinus Caroliniana.*
47. European linden.	*Tilia Europæa.*
48. American basswood.	*Tilia Americana.*
49. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
50. Yellow willow.	*Salix alba, var. vitellina.*
51. Weigela.	*Diervilla amabilis.*
52. Large-flowered syringa.	*Philadelphus grandiflorus.*
53. Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
54. Japan cedar.	*Cryptomeria Japonica.*
55. Hemlock.	*Tsuga Canadensis.*
56. Noble silver fir.	*Abies nobilis.*
57. Alcock's spruce.	*Picea Alcoquina.*
58. Rhododendron.	*Rhododendron everestianum.*
59. Mountain laurel.	*Kalmia latifolia.*
60. Chinese cork tree.	*Phellodendron Amurense.*
61. Catesby's Andromeda.	*Andromeda Catesbæi.*
62. Japan ground cypress, or Japan arbor vitæ. (Plume-leaved).	*Chamæcyparis* (or *Retinospora*) *pisifera, var. plumosa.*

Common Name	Botanical Name
63. Variegated English yew.	*Taxus baccata, var. elegantissima.*
64. Plume-leaved English elm.	*Ulmus campestris, var. plumosa.*

VI.

LINCOLN STATUE TO FIRST SUMMER HOUSE.

This ramble begins at the Lincoln Statue, south of the Flower Garden, follows the path which leads off to the west from the Walk on which the Statue stands, and skirts the southern slope of Breeze Hill to a point where the Walk breaks into two forks. Here we stop, and, turning back, follow the lake border to Ford Bridge.

Very near the end of the wall which bounds the south-western corner of the Flower Garden, you will find a hemlock. Directly back of the hemlock, up the hill a little to the north-west is a rare conifer, well worth your careful attention. You will know it by its reddish bark stripped and shredded very much like that of a red cedar. Look at its leaves. Do they make you think of the claws of a cat? Examine them closely and you will find that they are rather four-sided, curved and taper gradually down from a large sessile base to a sharp tip. This gives each branch a rather hard, close look. If you examine this tree carefully you may see its cones, either green (the new ones) or dull brown (the old ones) clinging at the end of the branches. The form of the tree is lofty and spire-like and its foliage is richly dark green. What is it? Perhaps you have already

guessed it to be the Japan cedar (*Cryptomeria Japonica.*) There are several of them along here and I love to see them sway in the wind, gathering their close hard branches about them and bowing with stately and courtly grace, then lifting in noble dignity, tall and fair and straight, swaying gently with a silent majesty that is truly regal.

Beyond this point as you follow the path eastward, are variegated English yew, whose dark, flat, sharp-pointed leaves you have, no doubt, long since grown to recognize at a glance; then Catesby's *Andromeda* (differing from the *Andromeda* you met up in Vale Cashmere, by its sharper, more taper pointed leaves) which nestles close beside another *Cryptomeria Japonica.* A little beyond the *Cryptomeria,* near the Walk, is *Chamæcyparis* (or *Retinospora*) *pisifera.* You can know it by its flat leaf-sprays which branch in rather gridiron manner. Further on you will find mountain laurel with shining, glossy elliptic leaves, then rhododendron with rosy-lilac flowers, and just about opposite the point made by the forking of the two branches of the Walk, you will see two conifers of special note and beauty. They stand side by side and are about of the same height. You will know them at once by the decided bluish cast to their silvery-green foliage. If you examine this, you will see that their needles first follow along parallel with the stem and then bend sharply up from it at right angles, making a kind of comb of the branch. There you will have the key to their identity and will know them to be very good speci-

mens of the noble silver fir. Close beside them, to the west, rises a graceful weeping bald cypress which you will do well to see in autumn. A search about the base of this tree may reward you with a sight of parts of their cones, for this tree bears them very generously as you can see by looking at its upper branches. There you can behold them hanging, little round balls, like small apples. But I don't think you will find them whole, on the ground. If you do you will be lucky.

Beyond the bald cypress, close by the Walk, is the Japan arbor vitæ *chamæcyparis* (or *Retinospora*) *pisifera, var. filifera.* It is a small evergreen with thread-like leaf-sprays.

About opposite this shrub, as you face the Lake, on the border of the tongue of bank made by the fork of Walks here, you will find some good specimens of the white cedar (*Chamæcyparis sphæroidea*) with glaucous-green foliage. Between the white cedars and the tip of the tongue of bank, stands a red cedar, and at the point of the tongue, a sapling bald cypress.

Up the slope of the hill, back of the rhododendron which you just passed a moment ago, you will find a fair specimen of the Alcock's spruce. You can distinguish it by its leaves, which are rather flattish-four-sided; curved, bluntly rounded at the tip, deep green on the upperside and whitish beneath.

Turn now and follow the path around the terrace which banks the Lake. You are now walking eastward and on your right, nearly in the center of the grassy rise of bank between you and the water is

a stocky yellow birch. You know it at once by its silvery gray-green bark tinged with copper. The bark peels and curls in shreds and frayed ends which give it a ragged appearance all its own.

Nearer the Walk stands a hackberry, identified easily by the warty knobs and ridges on its trunk, usually more pronounced on the bark near the ground. If the warty ridges do not satisfy you, look at its lop-sided long egg-shaped leaves which are very rough on the uppersides and hairy on the undersides. The fruit of the tree is a globular drupe or berry on a single stem. This berry is yellowish in summer but purple, when ripe in the autumn.

In the corner of the Walk, close by the water, on your right stands a well foliaged European hornbeam. The Walk curves around an arm of the water here to a little peninsula which juts out into the Lake, just north of Scarlet Island. A curved rail bounds the Walk and cuts it off from this peninsula. If you step over it and follow the shore of the Lake around this peninsula you will find a fine American elm just beyond the rail, then some umbrella trees, with their large paddle-like leaves, and conspicuous crimson fruits in September; then European tree alder, tulip tree, and American basswood at the north-westerly corner of the peninsula. Continuing on around, you pass Chinese cork tree about south of the basswood. This is an extremely interesting tree and you will find it close by the water's edge, leaning out over it. You can tell it by its opposite leaves which are odd-pinnate and made up of about nine (there may

be more) leaflets. The leaflets are long, taper pointed. Indeed its leaves look very much like those of the ailanthus. They turn bright red in autumn and remain on the tree for quite a considerable time. The fruit of this tree is small, black, and pea shaped and hangs on the tree in winter in grape-like clusters. Beyond the Chinese cork tree you meet umbrella tree again and again European alder, then American basswood and at the far eastern corner of the bank, in between the water and the rail, three umbrella trees close together. A handsome young Soulange's magnolia stands just back (to the west) of the square bend of the rail.

As you thread the tall grass of this pretty spot look for two English elms with plume-like heads, lifting themselves up not unlike Lombardy poplars. These stand just a little north-east of the Chinese cork tree and you will know them by the plume-like wreathing of their leaves. They are very odd varieties of the English elm.

Now we will come back to the Walk again, trusting that the Park authorities have given their permission to our wanderings, and resume our investigations east and south-eastwards.

As you follow the Walk it bends gracefully around to the south, leading you along a handsomely made terrace which holds the water back in a gentle bay north-east of Scarlet Island. This little bay is a beautiful sight in summer when the *Nelumbium* is in the height of its beauty, both in leaf and flower. Its leaf is large cup-shaped, and peltate, that is, on a stem

attached within the margin of the leaf which in this case is at the center. It is botanically known by the name *Nelumbium speciosum* and its flowers are pink, red, or white. Commonly it is called false lotus or sacred bean of the Orient.

Floating on these quiet waters you will also see the familiar water lily. This has a round leaf, cut from the margin to the center with a single straight incision and the leaf floats flat on the water, whereas the leaf of the *Nelumbium* is lifted a foot or more above the water on a thick stalk. After a rain it is a pretty sight to see the water globules running like mercury hither and thither in the cups of these big leaves of the *Nelumbium,* as they toss with the breeze.

As you go southwards, beyond the Fountain, at the end of the railed terrace, are beautiful beds of *Cacti,* which are interesting sights in summer, and just after you pass these, a grove of evergreens meets you on the right. We hope you have noticed, as you came along, the magnificent grove of Eastern plane trees which make such a noble display all about the Lincoln Statue. They certainly are doing well. See how different their leaves are from those of the American plane tree or buttonwood. The leaf of the Eastern variety is much more maple-like in its cutting.

But to go on, let us consider the grove beyond the bed of *Cacti.* The first tree you meet on the right of the Walk is Austrian pine, which you can identify by its dark green leaves, two in a fascicle and about six inches long. Beyond the Austrian pine is a Scotch

pine, with leaves two in a fascicle but only two to four inches long. The leaves of the Scotch pine have a decided twist and they are rather flattish near the point. The cones of the two trees are quite different, the Austrian's are about three times as large. The cone of the Scotch pine is small and its scales are distinctly quadrangular. Almost in a direct line, northwest from the Austrian pine, looking toward Scarlet Island, are European larch and two Norway spruces. Next to the Scotch pine is a European flowering ash, which bears greenish white fringe like flowers in clusters along its branches.

At this point a little branch path runs off to the right toward the Lake. Follow it for a moment to its end then come back to the Walk from which it sprang. You will pass on the right European larch, *Kœlreuteria,* and Scotch pine. On the left you pass *Forsythia viridissima,* variegated *Weigela* and Japan quince at the end of the path, by the water. Coming back to the larger Walk now, beside the mass of *Forsythia viridissima,* there are two more thriving bushes of Japan quince. Just back of the quince lifts up an European weeping larch, which I think one of the handsomest in the Park. It is a perfect type of the *Larix Europœa, var. pendula.* In early spring it is a marvel of fairy green, a floating cloud of lace, and as the season advances and summer breathes upon it, it covers itself with cascade upon cascade of dripping green, like a fountain, dropping its waters from terrace to terrace. Through its soft and graceful vail its cones can be seen clinging. In winter these

give the tree an added beauty, standing out in conspicuous jet against the sky.

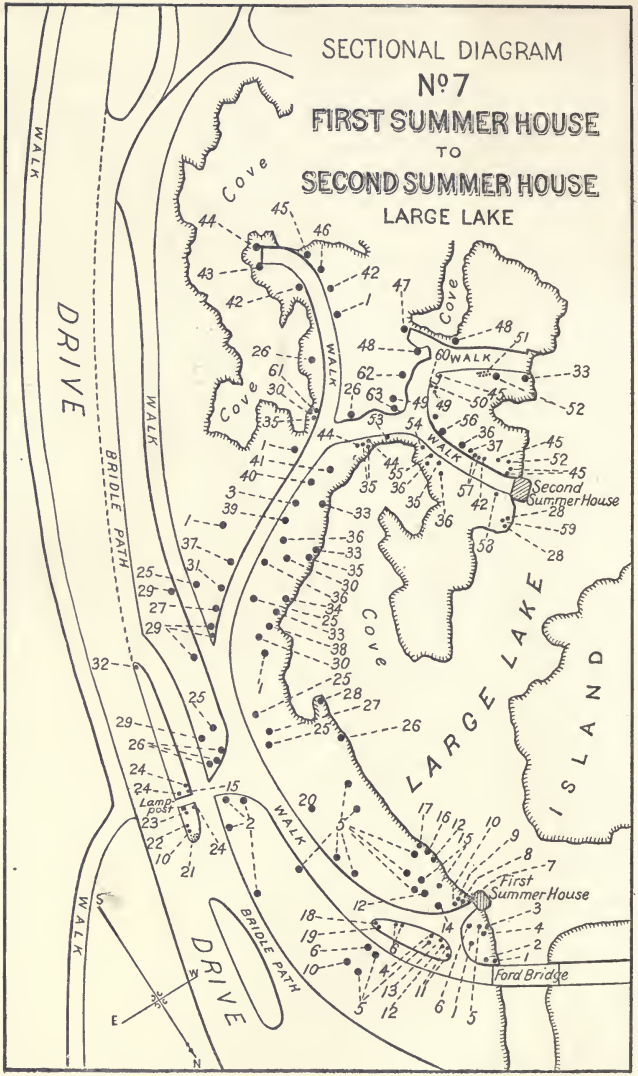
Near the Walk, just beyond this beautiful larch, is an American white birch, and, beside it, leaning out over the Lake, a well grown Judas tree. Here we have come to a spot where the Lake whispers alongside the Walk for a little distance, and from this open stretch you look across over the Large Lake to the wooded heights of Lookout Hill. Then the path runs on beneath the shade of arching trees and loses itself in green peninsulas and islands floating half asleep on dreaming slumbrous waters.

As you enter the green arcade beyond the open stretch of Walk, close down by the water's edge, you will find two American hornbeams standing in the corner of the path on the right. Beyond these are two trees which look very much like willows. But they are quite different. They are oleasters (*Elæagnus angustifolia*) and if you pass them in July, you may see them in bloom. Then amid their silvery gray-green leaves you may find their fragrant spicy flowers. These are little tubes with four petals yellow on the inside but silvery white on the outside. The leaves of the trees are narrow (*lanceolate*) and silvery white on the undersides, with a decided scurf.

Beyond the oleasters, on the right of the Walk are tulip tree, ash-leaved maple, sweet syringa, European larch, large flowered syringa, European larch again, red maple, European bird cherry, European larch again, European hazel, American hornbeam. These are by the border of the Walk, and, at the hornbeam,

you ought to be a little further than half the distance from the oleasters to the Ford Bridge. Now strike off to the water and along the bankside, you will find two very handsome weeping European silver lindens. You will know them by their sugar-loaf forms, smooth gray trunks and branches and cordate leaves green above and silvery beneath. Then come a red maple, cherry birch about half way between water and Walk, red maple again, and, back by the border of the Walk, *Deutzia crenata,* American hornbeam and Norway maple close by the right hand corner of Ford Bridge.

On the left of the Walk from the entrance of this delightful arcade, you have passed on your way to Ford Bridge, American elm; oleaster (about opposite ash-leaved maple); black haw; weeping bald cypress; American white ash (opposite red maple); American basswoods, one of them a little off to the left of the Walk, the other about opposite a European larch; European silver linden about opposite the first weeping European silver linden by the water; then another European silver linden about opposite the second weeping linden by the water; then a couple of Norway maples; and close by the Bridge, *Deutzia crenata; Weigela;* large flowered syringa and ninebark. Back of the *Deutzia crenata* you will find a buckthorn with leaves that make you think of dogwood, and back of the syringa, is a majestic old yellow willow. There are several of these fine old willows here all along the borders of the stream and beautiful sights they are in winter when their twigs turn brassy yellow


SECTIONAL DIAGRAM
No 7
FIRST SUMMER HOUSE
TO
SECOND SUMMER HOUSE
LARGE LAKE
DRIVE
WALK
BRIDLE PATH
Cove
LARGE LAKE
ISLAND
Second Summer House
First Summer House
Ford Bridge
Lamp post
N
E
W
S

Explanations, Sectional Diagram No. 7

	Common Name	Botanical Name
1.	European linden.	*Tilia Europæa.*
2.	European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
3.	Broad-leaved European linden.	*Tilia Europæa, var. platiphylla.*
4.	Weigela.	*Diervilla amabilis.*
5.	Tulip tree.	*Liriodendron tulipifera.*
6.	Golden bell or Forsythia.	*Forsythia viridissima.*
7.	Chinese Wistaria. (Pale blue flowers.)	*Wistaria Sinensis.*
8.	Weigela. (Deep crimson flowers.)	*Diervilla floribunda.*
9.	Mock orange or sweet syringa.	*Philadelphus coronarius.*
10.	Reeve's spiræa.	*Spiræa Reevesiana.*
11.	Japan quince.	*Cydonia Japonica.*
12.	Silver bell or snowdrop tree.	*Halesia tetraptera.*
13.	Bridal wreath spiræa.	*Spiræa prunifolia.*
14.	Snowy hydrangea.	*Hydrangea nivea.*
15.	Hop tree or shrubby trefoil.	*Ptelea trifoliata.*
16.	Oleaster.	*Elæagnus angustifolia.*
17.	American or white elm.	*Ulmus Americana.*
18.	Hall's Japan honeysuckle.	*Lonicera Japonica* (or *Halliana*).
19.	Large-flowered syringa.	*Philadelphus grandiflorus.*
20.	American basswood.	*Tilia Americana.*
21.	Lilac. (White flowers.)	*Syringa vulgaris, var. alba.*
22.	Judas tree or redbud.	*Cercis Canadensis.*
23.	Japan pagoda tree.	*Sophora Japonica.*
24.	Kœlreuteria.	*Kœlreuteria paniculata.*
25.	American white ash.	*Fraxinus Americana.*
26.	American or white elm.	*Ulmus Americana.*
27.	Sugar maple.	*Acer saccharinum.*

Common Name	Botanical Name
28. Bay or laurel-leaved willow.	*Salix pentandra* (or *Laurifolia*).
29. English elm.	*Ulmus campestris.*
30. Osage orange.	*Maclura aurantiaca.*
31. English elm.	*Ulmus campestris.*
32. Lilac.	*Syringa vulgaris.*
33. Yellow or golden willow.	*Salix alba, var. vitellina.*
34. Common barberry.	*Berberis vulgaris.*
35. Red maple.	*Acer rubrum.*
36. Cucumber tree.	*Magnolia acuminata.*
37. Umbrella tree.	*Magnolia umbrella.*
38. Mountain-ash-leaved spiræa.	*Spiræa sorbifolia.*
39. American basswood.	*Tilia Americana.*
40. American hornbeam.	*Carpinus Caroliniana.*
41. Purple barberry.	*Berberis vulgaris, var. purpurea.*
42. Hemlock.	*Tsuga Canadensis.*
43. Paper or canoe birch.	*Betula papyrifera.*
44. Flowering dogwood.	*Cornus florida.*
45. Norway spruce.	*Picea excelsa.*
46. Scotch elm.	*Ulmus montana.*
47. Cherry birch.	*Betula lenta.*
48. Mugho pine.	*Pinus montana, var. Mughus.*
49. Scotch pine.	*Pinus sylvestris.*
50. Large-flowered syringa.	*Philadelphus grandiflorus.*
51. Common elder.	*Sambucus Canadensis.*
52. Bald cypress.	*Taxodium distichum.*
53. Huckleberry.	*Gaylussacia resinosa.*
54. Mock orange or sweet syringa.	*Philadelphus coronarius.*
55. Large-flowered syringa.	*Philadelphus grandiflorus.*
56. Soulange's magnolia.	*Magnolia Soulangeana.*
57. Snowy hydrangea.	*Hydrangea nivea.*
58. European or tree alder.	*Alnus glutinosa.*
59. American white or gray birch.	*Betula populifolia.*
60. Bush Deutzia. (Variety Pride of Rochester.)	*Deutzia crenata, var. Pride of Rochester.*
61. Speckled or hoary alder.	*Alnus incana.*
62. Nordmann's silver fir.	*Abies Nordmanniana.*
63. Pitch pine.	*Pinus rigida.*

VII.

FIRST SUMMER HOUSE TO SECOND SUMMER HOUSE, LARGE LAKE.

Just beyond the cozy little rustic bridge that spans the horse ford, a pretty summer house looks out upon the Large Lake. It is the first of a series of four and our walk in this chapter begins here and runs on to the next summer house by the lakeside.

But before starting let us look at a few things in between the House and Ford Bridge. Just by the corner of the Bridge, near the water's edge, is European linden and next to it, by the Walk is a fine European silver linden. Then come another European linden and *Forsythia viridissima* near the Summer House. Back of the *Forsythia* almost in a straight line toward the Lake are tulip tree and broad-leaved European linden.

In the little island of shrubbery opposite the Summer House, there are graceful silver bell or snowdrop trees, beautifully marked with yellowish streaks through their dusky bark and Japan quince almost at the point nearest Ford Bridge. About opposite the entrance of the Summer House, stands a fine mass of the bridal wreath spiræa and not far from it a beautiful clump of the rosy *Weigela.* Further along the border of this island near its other end are great masses of the *Forsythia viridissima,* which you

can know at once by their strong, clean lanceolate leaves. At the extreme end of this island of shrubbery there is a tangled mass of Hall's Japan honeysuckle, woven through and through, with morning glory charmingly offsetting the sweeping bank of large flowered syringa beside it.

Having considered these few things in a preliminary way, let us now start from the First Summer House and take note of the things on the right of the Walk. Close beside the Shelter, the *Diervilla floribunda* sets all its deep crimson horns of color blowing in early June and back of it, nearer the water, the sweet syringa, equally beautiful opens its white flowers in great profusion. Beside the *Diervilla* or *Weigela,* a Reeve's spiræa bends with its weight of bloom. Over by the water, knee deep in the tall and waving grass of lovely June days, the hop tree or shrubby trefoil stands fingering the breezes from the Lake with its unmistakable three leaves. Just in front of this, close by the Walk, is a hydrangea which on account of the silvery or snowy underside of its leaf has been called *nivea.* It is a beautiful shrub and when the wind blows and turns it into a living flame of silver it is a joyous sight. It blooms about July, and has white flowers in flat corymbs which are very beautiful against the dark green (upper side) of its heart-shaped leaves.

Just beyond this point, there is a fine group of tulip trees which are glorious, either in June when they have set all their beautiful greenish yellow flowers to the sun or in autumn when they flutter tints of richest chrome yellow.

Back of the hop tree, by the border of the Lake, you will find another silver bell, and beyond the silver bell, oleaster with its willow-like habit of growth and gray-green silvery leaves. Beyond the oleaster is American elm.

Coming to the Walk again and following on, you pass a fine American basswood a little beyond the last tulip by the Walk. You cannot mistake it, especially if it is in leaf, for its leaves are large, noticeably lop-sided heart-shaped. As the season advances, the American basswood shows distinct shades of yellow-green in its leaves and if you get to know this tint, you can tell the American basswood afar off. Notice how differently it puts out its branches from the habit of the European linden. A little further on, the Walk throws off to the left a short arm to cross the Drive. As it nears the Bridle Path and Drive, you pass some splendid European silver lindens, very easily known by their smooth bark and cordate leaves, white on the undersides. You can tell them also by their noticeably sugar loaf form. Crossing the Bridle Path for a moment, in the south-west corner of the little space between it and the Drive, at the left, is *Kœlreuteria.* A lamp-post guards the south-east corner and back of it, by the border of the Drive you meet a fine Japan pagoda tree, then Judas tree with good-sized heart-shaped leaves, then Reeve's spiræa and a fine clump of lilac at the extreme north-easterly end of this island-like space. Directly opposite the lamp-post, on the right of the path is another *Kœlreuteria,* with a young hop tree or shrubby trefoil beside it.

Behind the trefoil stands another *Kœlreuteria* and at the extreme south-westerly end of the space here stands a clump of lilac. This clump bears purple flowers.

Now let us retrace our steps to the Walk again, and follow it on toward the Second Summer House. As you go along, you pass several American elms, an English elm and an American white ash. The American elms you cannot mistake, with their vase-like habit of growth. The English elm is of oak-like look, short-trunked, stocky of build. The American ash you can distinguish by its compound leaf and by its lozenge-like bark. Almost directly opposite the ash stands one of its clansmen, tall and majestic, a glory of brilliant sun-fire playing over its bark on bright winter days. Not far from this ash, you meet a sugar maple, beautiful in autumn when its leaves begin to play with reds and golds and crimsons. Back of these two trees, close by the water's edge stand an American elm and a laurel leaved willow. The laurel leaved willow stands tip-toe on the little point or jut of land that makes a cove here. Walk up to it and see its beautiful shining dark green leaves. There are many of these willows in the Park and it is well to make their acquaintance early. Stand back a little and get the sunshine over their glossy leaves. Isn't that a flame of white fire! Watch the breeze send them into shivers of flying glass. The leaf of this tree somewhat resembles that of the shining willow (*Salix lucida*), but the leaf of the shining willow is much longer-taper-pointed.

Coming back to the Walk again, beyond the sugar

maple, you find on the right another good sized white ash and beyond it, not far from the point where the Walk forks, European linden. A good Osage orange stands near the Walk, just beyond the linden and about opposite the point where the Walk branches. The Osage orange is identified by the very distinct spines in the axils of its leaves. Look for them, for they are worth seeing. Some of the botanies speak of the flowers of the Osage orange as inconspicuous, but I saw this tree covered with blossoms one June day and a very pretty sight it was. The tree has interesting fruit, large and globular and of an orange-like look, whence its name. It is golden yellow when ripe.

A little off to one side, from the Osage orange, about midway between it and the water is a clump of very peculiarly leaved shrubbery. If you don't know it and should come upon it in July, you would wonder what it was, with its rather spindle shaped heads of fuzzy white flowers. The heads make you think of meadow sweet and spiræas. It is a spiræa and its leaves tell you that it is the mountain-ash-leaved spiræa. To me it is very beautiful and you will come across it in many parts of the Park. In July and August it is quite conspicuous and it makes a brave sight on the days when most of the trees and shrubs are over with their blooming. You cannot mistake it and if you know the leaf of the mountain ash, you will see how well this spiræa deserves its name.

Further on, by the water's edge, a willow thrusts up its grace and strength into the sunlight. It has

beautiful leaves, long and lance shaped and softly silvery gray-green on the undersides. Every breeze sends through it sudden drifts of light, very fair and beautiful to watch. But the glory of this willow is in the winter. Then its twigs turn a rich, brassy yellow which you can see afar off. It is the yellow or golden willow, really a variety of the white willow. How lovely is the dull brassy yellow which this tree lifts through the purple-brown maze of bare twigs in winter. It is pronounced, yet so subdued. Its very look is winter and goes with humming ice and bright sunshine, and clean, cold air, and sparkling snow; with creaking tree trunks and soft violet shadows over the snow; with that still, winter's quiet which is indescribable in words, but which is so full of a something that stirs way down the innermost soul.

Beyond the yellow willow, near the Walk a fine white ash lifts up the blazonry of its diamond panelled bark, gloriously rough and rugged, full of vigor, life and hardiness. Sometimes I smite them with my fist, just to feel the firm tingle of their ridges. Off to the right again and near the water, you will meet a good clump of common barberry (*Berberis vulgaris*) which you will have no difficulty in identifying from its obovate-oblong leaves and abundance of small spines. Try to see barberry in September, when it is hung full of fruit. Its fruit (berries, of oblong shape) is very handsome then, rich cool crimson in color, glowing with autumn.

Near the Walk again, we meet cucumber tree (*Magnolia acuminata*) and if you look up in its branches

and find its fruit, you will see the significance of its name. This fruit looks quite like a young cucumber, especially when green, but in early September, it certainly loses its claim to the name, for then, it turns a cool magenta. The husk of the fruit breaks open in early fall and through the openings, seeds of the richest coral, push out and hang on fairy threads of silk in a most curious way. This is the fruiting habit of the magnolia, and it certainly is an odd one. About opposite the cucumber tree, on the other side of the Walk and a little back, you will find the umbrella tree (*Magnolia umbrella*). If you are curious to know why this tree is called "umbrella," stand under it, look up, and see the way its leaves hang from the ends of its branches. This will convince you that it has been well named. The leaves of the umbrella tree are much larger than those of the cucumber tree and, when fully grown, are from one to two feet long, while those of the cucumber are from five to ten inches only. The leaf of the cucumber tree is pointed at both ends (*acuminata*) and is thin and pale beneath. The two trees grow very differently, the cucumber tall and straight with rather regular outline, the umbrella sprawls like a catalpa or an apple tree. It is very easy to identify them and as they are here together, it is well to study their differences. The cucumber tree bears small greenish yellow flowers about three inches wide in late spring or early summer, the umbrella tree, broad white flowers, from six to eight inches wide, in May, usually. In the autumn, the

former tree turns to a beautiful, soft, light fawn color, the latter to a subdued bronze.

Beyond the cucumber tree, about midway toward the water's edge, you will find another Osage orange, and beyond this tree, a red maple leaning over the stream. Beyond the red maple is golden willow again, and to the left of this tree, by the Walk, another cucumber tree. Beyond this cucumber tree, close by the Walk, an American basswood boldly flings out its strong branches and large leaves in considerable contrast both in point of size and texture from those of the broad-leaved European linden beside it. Next beyond the linden comes American hornbeam, with its birch-like leaves, but with bark that is only hornbeam. No other tree can lay claim to its smooth, hard-finished bark so beautifully veined with threads of silver. Beyond the hornbeam a mass of purple barberry spreads its beautiful color against the wealths of green nestled here. Diagonally opposite the barberry, on the other side of the Walk is European linden.

The path we are following forks again here, one branch stealing around to the right to creep through the canopies of waving green out to Second Summer House, the left goes on to search the nooks about the end of this peninsula. As the path turns to the right you pass flowering dogwood; two red maples; another flowering dogwood; huckleberry; sweet syringa, in a large clump just beyond an open stretch of Walk; beside it a clump of large flowered syringa; cucumber tree, a little offside to the right; red maple; cucumber tree again, and, very near to the Summer House,

a good European or tree alder. On the point of shore to your right as you stand in the Summer House and face the Lake, are two laurel-leaved willows, tall and flinging off the sunlight from their leaves in showers of white fire at every breeze. In between them stands a white or gray birch.

Along the little arm of the path from the clumps of syringa (back a short distance) you passed on your left as you came to the Summer House, Soulange's magnolia, about opposite the sweet syringa; cucumber tree, opposite the red maple; three bushes of the snowy hydrangea; and, close beside the Summer House, to the left, two Norway spruces standing nearly side by side. Back of these is a tall bald cypress. Compare the leaves of the Norway spruce with those of the bald cypress. Note the fine feathery two ranked flat leaves of the cypress as compared with the four sided, rigid, curved leaves of the spruce.

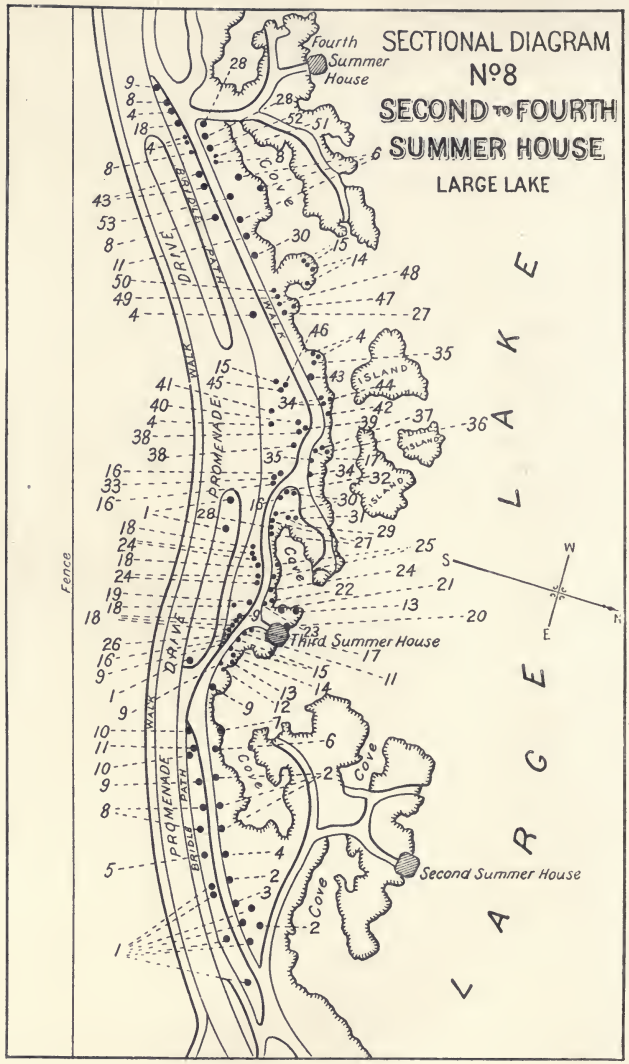
Let us go back now to the Soulange's magnolia and follow the path along its course here to the west. On the left are two evergreens close together. The first is pitch pine, which you can identify by its persistent cones with sharp prickles on the scales and its leaves in bundles of three, stout and stiff. The second evergreen is Scotch pine. Diagonally across from the Scotch pine on the right of the Walk, is another Scotch pine, which casts its branches shelteringly over a handsome bush *Deutzia* and a fine clump of large flowered syringa. These stand side by side near a short indentation of the Walk. On the further side of this indentation stands Norway spruce. Then the path

takes another turn to the right, out toward the water, and if you go along there you will find, on your right, common elder, about half way between the Norway spruce and the water, and close beside the elder, bald cypress. At the extreme end of this little reach of path stands a golden willow leaning out over the water.

If you come back now to the Norway spruce last mentioned, about due south-west of it across the Walk, stands Mugho pine. East of the Norway spruce, across the Walk, a Nordmann silver fir is fighting hard for its life. Its flat leaves, notched at the tip, and two white lines on their undersides tell you that is a Nordmann. Beyond the Nordmann, directly back of a little squarely cut bight of the Walk, on your left now, is another Mugho pine, and at the extreme left-hand corner of this bight you will find cherry birch.

Let us now go back and pick up the thread of our ramble at the point where the Walk forked beside the dogwoods and huckleberry. We followed the right hand branch out to the Second Summer House. Let us now follow the left hand branch out to the end of the peninsula on your left. You pass red maple, Osage orange (near the water) and close by the Walk again, still at your left, beyond the Osage orange, a good specimen of the hoary or speckled alder (*Alnus incana*). Continuing, you pass American elm and, some distance beyond, near the end of the Walk here, hemlock, and at the very end of the Walk, north-easterly corner, paper or canoe birch. At the south-westerly corner stands flowering dogwood. To this

point, you have passed on your right, American elm, opposite the red maple; European linden, hemlock, about opposite the other hemlock on the left of the Walk, Scotch elm and beyond the elm, very near the spot where the Walk comes close to the water, is another Norway spruce.


SECTIONAL DIAGRAM
Nº8
SECOND TO FOURTH
SUMMER HOUSE
LARGE LAKE
Fourth Summer House
Third Summer House
Second Summer House
Cove
ISLAND
PROMENADE DRIVE
BRIDLE PATH
WALK
Fence
LARGE LAKE
S
W
E
N

Explanations, Sectional Diagram No. 8

Common Name	Botanical Name
1. English elm.	*Ulmus campestris.*
2. Sugar maple.	*Acer saccharinum.*
3. American white ash.	*Fraxinus Americana.*
4. European linden.	*Tilia Europæa.*
5. Single-leaved European ash.	*Fraxinus excelsior, var. monophylla.*
6. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
7. European weeping beech.	*Fagus sylvatica, var. pendula.*
8. Scotch elm.	*Ulmus montana.*
9. Ash-leaved maple or box elder.	*Negundo aceroides.*
10. Black haw.	*Viburnum prunifolium.*
11. Red osier.	*Cornus stolonifera.*
12. Red maple.	*Acer rubrum.*
13. Oleaster.	*Elæagnus angustifolia.*
14. Weeping European larch.	*Larix Europæa, var. pendula.*
15. Bald cypress.	*Taxodium distichum.*
16. Californian privet.	*Ligustrum ovalifolium.*
17. Tulip tree.	*Liriodendron tulipera.*
18. European flowering ash.	*Fraxinus ornus.*
19. Aucuba-leaved ash.	*Fraxinus Americana, var. aucubæfolia.*
20. Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
21. European hazel.	*Corylus avellana.*
22. Hop tree or shrubby trefoil.	*Ptelea trifoliata.*
23. Golden bell or Forsythia.	*Forsythia viridissima.*
24. Kœlreuteria.	*Kœlreuteria paniculata.*
25. European bird cherry.	*Prunus padus.*
26. Single-leaved European ash.	*Fraxinus excelsior, var. monophylla.*

Common Name	Botanical Name
27. Weigela.	*Diervilla amabilis.*
28. Judas tree or redbud.	*Cercis Canadensis.*
29. European or tree alder.	*Alnus glutinosa.*
30. Bush Deutzia. (White single flowers.)	*Deutzia crenata.*
31. Northern prickly ash or toothache tree.	*Xanthoxylum Americanum.*
32. Large-flowered syringa.	*Philadelphus grandiflorus.*
33. American or white elm.	*Ulmus Americana.*
34. Washington thorn.	*Cratægus cordata.*
35. Hackberry or sugarberry.	*Celtis occidentalis.*
36. Oleaster.	*Elæagnus angustifolia.*
37. Fragrant honeysuckle.	*Lonicera fragrantissima.*
38. Japan quince.	*Cydonia Japonica.*
39. Common barberry.	*Berberis vulgaris.*
40. Silver maple.	*Acer dasycarpum.*
41. Indian bean or Southern catalpa.	*Catalpa bignonioides.*
42. False indigo.	*Amorpha fructicosa.*
43. English hawthorn.	*Cratægus oxyacantha.*
44. Arrowwood.	*Viburnum dentatum.*
45. European spindle tree.	*Euonymus Europæus.*
46. Siberian red osier.	*Cornus alba, var. Siberica.*
47. Bur or mossy cup oak.	*Quercus macrocarpa.*
48. Weigela. (Deep crimson flowers.)	*Diervilla floribunda.*
49. Snowball.	*Viburnum opulis, var. sterilis.*
50. Weigela.	*Diervilla amabilis.*
51. Bush Deutzia (Pride of Rochester).	*Deutzia crenata, var. Pride of Rochester.*
52. Cornelian cherry.	*Cornus macsula.*
53. Sycamore maple.	*Acer pseudoplatanus.*

VIII.

SECOND TO FOURTH SUMMER HOUSE, LARGE LAKE.

This ramble begins at the third fork of the Walk to the west of the rustic (Ford) bridge, not far from Second Summer House, Large Lake. We commence with the left hand branch of the fork and follow the path almost due west. On the left of the path, as we start in, are well grown English elms, stocky, hardy, oak-like in growth. Speaking of English elms, in this vicinity the whole stretch of the Walk running along the south side of Promenade Drive is lined with them.

But to come back to our path. As we ramble on, we pass maples, mostly sugar maples, on the right and on the left. The fifth tree, on the left, is one of those peculiar single-leaved ash trees, (*Fraxinus excelsior, var. monophylla*). Opposite the single-leaved ash stands European linden. Then come two Scotch elms on the left, with sugar maples opposite them, and, beyond the second Scotch elm, ash-leaved maple.

As the Walk meets the Bridle Path here, almost at the point of junction, stands a black haw (*Viburnum prunifolium*) with another one just a little east of it. They are small trees, a little higher than your head and have oval leaves, obtuse or slightly pointed. They bloom in late May or early June, with profuse white flat topped clusters of flowers and their fruit, black or

blue-black berries (sweet), ripens in September. The Walk has an open space here, as you go on, with the Bridle Path close on its left. About the middle of its right hand bank stands a fine ash-leaved maple. A little back of this tree and to the east, close down on the water's edge is one of the handsomest weeping beeches in the Park. Back of the weeping beech on the borders of the little cove here, are European silver linden and weeping European silver linden.

Coming back to the Walk again and proceeding westward we find on the left of the Walk, almost on the point where the greensward begins to form a bank at the junction of the Walk and Bridle Path, a fine mass of Californian privet, which, in June, is covered with white flowers. Then comes a little cluster of European flowering ashes, (*Fraxinus ornus*). You may know them easily by their short trunks and gray, brittle-looking branches. There are a number of them here, and if you pass them in late May or early June you will see them all fluffed over with profuse greenish-white fringe-like flowers, borne in clusters on the ends of the branches. But do not mistake the furthest one of these low branching trees for one of the European flowering ashes. That tree, which stands about opposite the arm of the Walk which runs out to the Summer House here, is an ash-leaved maple, or box elder. You can know it at once by its dark greenish bark and, if in foliage, by its pinnate leaves, of from three to five leaflets. On the right you have passed to this point bald cypress, about opposite the mass of Californian privet, *Forsythia viridissima,* another bald cy-

press, and just as the Walk bends off an arm to the little Summer House that holds open windows over the Large Lake, a fine tulip tree rattles luxuriant leaves in the waving summer breezes or holds flamboyant torches of straw colored seed cones against the blue of winter skies. This cozy little Summer House, the third on the way around the Large Lake, as you go westward from Ford Bridge, is beautifully hung in summer with the bloom (purple) of the *Wistaria.*

As the Walk leaves the Summer House and slips along beside the waters of the Lake, it passes a clump of European hazel, which it is worth while to come to see in early spring. Then its little catkins lengthen into hanging lace of softest golden yellow, with faint tinges of red. Do not miss it. It is a fairy sight and you can see it in early March when the crow blackbirds begin to wheeze over the leafless trees. This hazel clump stands about midway between the Summer House and the main Walk, on the water side of the Walk.

Now we come back again to our main Walk and follow it westward again. On the right we pass *Forsythia,* hop tree, *Kœlreuteria,* two European bird cherries, nearly side by side, and as the path bends northward to follow the dent of the cove here, we meet great masses of *Weigela,* which in June will blow rosy horns and fill the air with fragrance. Then come Judas tree, *Weigela,* bush *Deutzia,* with white single flowers, Californian privet, large flowered syringa, and bush *Deutzia* again, bringing us to another junction of the Walk. Back of the first clump of *Deutzia crenata,*

you will find the Northern toothache tree, with odd-pinnate alternate leaves of from five to nine leaflets. On the left we have passed *Fraxinus Americana, var. aucubaefolia* aucuba-leaved ash, with odd looking, gold blotched leaves; European flowering ash; *Kœlreuteria;* European flowering ash; *Kœlreuteria* again and European ash again. Then comes a little open space and we begin again with privet (American elm behind it), *Weigela* and Washington hawthorn, about opposite the point of the junction. This junction runs off from the Walk to the right to thread its way through the leafy arcades of little peninsulas.

As we walk along, just beyond the point of junction, well grown Washington thorns hang over the Walk on the right. You may know them in foliage by their rather triangular leaves. They are late in reddening their berries, but they hold them tenaciously and these show beautiful ruddy patches of color through the bare winter trees. Beyond, at a bend of the Walk, stands a goodly hackberry. Opposite the hackberry, on the left of the Walk, are clumps of Japan quince. Note their thorns. They are beautiful sights in April. Then they fairly flame crimson with their scarlet flowers, golden hearted at the core, and fill all the paths with beautiful outbursts of color. Beyond, on the right, are tulip trees and close down by the Lake, leaning over it, the *Elaeagnus* bends its willow-looking trunk, bristling with whip-like branches. The *Elaeagnus* is a ragged, tattered-looking sort of a tree in winter, with its shredded bark, and bunching, close clustering shoots, but see it in sum-

mer, when the breeze is playing with its living silver, sending swift flames of light through its soft gray-green, or smell it when it unbosoms its spicy fragrance to the July or early August heat. You can scarcely believe that so pungent a perfume can come from the little yellow flowers you see on this willow-looking tree. If you pass it during the early days of September, look carefully amid its leaves for its very beautiful silver-gray berries. They are about half an inch long and quarter of an inch wide.

The path makes a bend here, and as you swing with it you pass, on the left, great bushes of barberry (*Berberis vulgaris*), which in late May deck themselves with hanging clusters of golden flowers. In the autumn how beautiful are their cool crimson berries and frosty red-purple leaf tints! Walk here in September just to see them. Close down by the water is *Amorpha fructicosa*, and a little further west along the streamside, you will find arrowwood with its beautifully cut leaves. By the Walk, on the right, are more Washington thorns and on the little jut of land that noses out into the Lake, just beyond, are hackberry and European linden. You can tell the European linden in winter by its dusky branches and reddish end twigs. The silver lindens have light granite-gray bark and branches. On the left, about opposite the westerly Washington thorn, is a good sized clump of Siberian red osier with white flowers in flat heads in early summer, which develop into white berries. This bush has brilliant glossy crimson twigs in winter. A little south-west of it rises the spire-like form of a handsome

bald cypress (*Taxodium distichum*), *distichum* because the leaves spread in two ranks. If you wish to see a sight of great beauty, watch the bald cypresses dress their branches in the early spring, covering them with fine feathery leaves of tenderest green. Here comes another open stretch of Walk with the water of the Large Lake close to the path. In a corner of the little bay the *Amorpha fructicosa* is met again, holding up its conspicuous tell-tale fingers, full of seeds, to the eye of the winter rambler. Across the short stretch of open, you meet rearing up, dark barked and grizzly, the strong, rugged overcup or mossy cup oak. If you chance here in autumn, you will have no difficulty in finding under this tree its identifying acorns, great hairy-looking things all frouzled over with fringe which literally on many acorns almost covers the nut. Against the winter's sky the tree cuts a clear, bold outline for all its twisting branches. Its end branches are noticeably corky and somewhat quadrangular. Closer to the Walk are clumps of *Weigela* with rose-colored flowers in June; common snowball, with great white globes of bloom in May; syringa with white four-petaled fragrant flowers in June. Further along, still on the right of the Walk, is red osier or spreading cornel, *Cornus stolonifera,* easily known by its striated branches and, in autumn, by its lead colored or blue-black berries, silver lindens, *Tilia Europæa, var. argentea* and *Tilia Europæa, var. argentea pendula, Weigela, Forsythia viridissima,* Cornelian cherry (*Cornus mascula*) and Judas tree. Here the Walk reaches out another arm to the right feel-

ing for the third westerly Summer House on the borders of the Large Lake.

Up to this point, you have passed on the left, European linden (about opposite the snowball), two beautiful little English hawthorns (about opposite the silver lindens), Norway maple (opposite the *Forsythia*), European linden (diagonally opposite the Cornelian cherry), Scotch elm (*Ulmus Montana*), about opposite the spot where the Walk sends out its arm to the Summer House. A little further on the Walk forks again, a short branch leading to the left close to the Bridle Path, the other drawing you along through mazy tangles of interlacing shrubs and overarching boughs, beside still waters which sleep amid nooky peninsulas and floating islands that lull the spirit into peace and melt the city away through the mists of their leafy scenes. This is one of the most beautiful parts of the Park and is so loved by birds that you cannot wander here in the leafy months without getting sight of many a wing flash. There were a pair of yellow billed cuckoos I watched one summer at home in their nest near here, and many a time have I seen the scarlet flash of the red-winged blackbird skimming these silent waters or watched the king bird spread his white belted tail from the rustling tops of some of these lakeside bushes. At every turn the landscape artist has made for the rambler here vistas of marvelous beauty. Walk here in autumn when the stripping winds have bared the trees but to build leaf bridges over these quiet coves or come later when the frost first kisses them and prisons the floating leaves in glass.

SECTIONAL DIAGRAM
Nº9
FOURTH SUMMER HOUSE
TO
BREEZE HILL
PARK CIRCLE
WALK
WEST LAKE DRIVE
Lamp-post
Steps
Fourth Summer House
Culvert
Artesian Well
LOOKOUT HILL
LARGE LAKE
Brooklyn Miniature Yacht Club
BREEZE HILL
DRIVE

Explanations, Sectional Diagram No. 9

Common Name	Botanical Name
1. European white birch.	*Betula alba.*
2. English cork bark elm.	*Ulmus campestris, var. suberosa.*
3. Willow-leaved European flowering ash.	*Fraxinus ornus, var. salicifolia.*
4. Shady hydrangea.	*Hydrangea arborescens.*
5. Cucumber tree.	*Magnolia acuminata.*
6. Honey locust.	*Gleditschia triacanthos.*
7. Silver maple.	*Acer dasycarpum.*
8. Weeping European larch.	*Larix Europæa, var. pendula.*
9. European silver linden.	*Tilia Europæa, var. argentea.*
10. European ash.	*Fraxinus excelsior.*
11. English hawthorn. (Red flowers.)	*Cratægus oxyacantha.*
12. Black or pear hawthorn.	*Cratægus tomentosa.*
13. European or tree alder.	*Alnus glutinosa.*
14. Laburnum, golden chain, or bean trefoil tree.	*Laburnum vulgare.*
15. Kœlreuteria.	*Kœlreuteria paniculata.*
16. False indigo.	*Amorpha fructicosa.*
17. Fringe tree.	*Chionanthus Virginica.*
18. Hercules's club, Devil's walking stick, or Angelica tree.	*Aralia spinosa.*
19. Smoke tree.	*Rhus cotinus.*
20. Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
21. Black or pear hawthorn.	*Cratægus tomentosa.*
22. Fragrant honeysuckle.	*Lonicera fragrantissima.*
23. Cut-leaved weeping European white birch.	*Betula alba, var. pendula laciniata.*
24. Shadbush, June berry, or service berry.	*Amelanchier Canadensis.*
25. European flowering ash.	*Fraxinus ornus.*

Common Name	Botanical Name
26. Ash-leaved maple or box elder.	*Negundo aceroides.*
27. Weeping European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
28. English hawthorn.	*Cratægus oxyacantha.*
29. Golden bell or Forsythia.	*Forsythia viridissima.*
30. Yellow-wood.	*Cladrastis tinctoria.*
31. Siberian pea tree.	*Caragana arborescens.*
32. Ginkgo tree.	*Salisburia adiantifolia.*
33. Japan stachyurus.	*Stachyurus præcox.*
34. Round-leaved or vine maple.	*Acer circinatum.*
35. Sycamore maple.	*Acer pseudoplatanus.*
36. Norway maple.	*Acer platanoides.*
37. False indigo.	*Amorpha fructicosa.*
38. Japan maple.	*Acer polymorphum.*
39. Japan pagoda tree.	*Sophora Japonica.*
40. Camperdown elm.	*Ulmus montana, var. Camperdownii pendula.*
41. New American willow.	*Salix purpurea, var. pendula.*
42. European purple beech. (Leaves very dark crimson-purple.)	*Fagus sylvatica, var. atropurpurea.*
43. Austrian pine.	*Pinus Austriaca.*
44. Californian privet.	*Ligustrum ovalifolium.*
45. Kentucky coffee tree.	*Gymnocladus Canadensis.*
46. Kœlreuteria.	*Kœlreuteria paniculata.*
47. Bayberry or wax myrtle.	*Myrica cerifera.*
48. Arrowwood.	*Viburnum dentatum.*
49. Weeping European beech.	*Fagus sylvatica, var. pendula.*
50. Golden barked Babylonian or weeping willow.	*Salix Babylonica, var. ramulis aureis.*
51. Pin oak or swamp Spanish oak.	*Quercus palustris.*
52. Black oak.	*Quercus coccinea, var. tinctoria.*
53. Umbrella tree.	*Magnolia umbrella.*
54. Soulange's magnolia.	*Magnolia Soulangeana.*
55. Weeping bald cypress.	*Taxodium distichum, var. pendulum.*
56. Ailanthus or tree of Heaven.	*Ailanthus glandulosus.*
57. Japan snowball.	*Viburnum plicatum.*

Common Name	Botanical Name
58. Aucuba-leaved ash.	*Fraxinus Americana, var. aucubæfolia.*
59. Josika lilac or chionanthus (fringe tree) leaved lilac. Purple flowers).	*Syringa Josikæa.*
60. Dwarf mountain sumac.	*Rhus copallina.*
61. European mountain-ash or Rowan tree.	*Pyrus aucuparia.*
62. Purple leaved Norway maple.	*Acer platanoides, var. Geneva.*
63. Maple of Northern China.	*Acer truncatum.*
64. Black cherry.	*Prunus serotina.*
65. Pyramid oak.	*Quercus robur, var. fastigiata.*
66. Common locust.	*Robinia pseudacacia.*
67. European spindle tree.	*Euonymus Europæus.*
68. French tamarisk.	*Tamarix Gallica.*
69. Bay or laurel-leaved willow.	*Salix pentandra* (or *Laurifolia*).
70. Common elder and false indigo. (Intermingled).	*Sambucus Canadensis* and *Amorpha fructicosa.*
71. Lombardy poplar.	*Populus dilatata.*
72. Reeve's spiræa.	*Spiræa Reevesiana.*
73. Common buckthorn.	*Rhamnus cathartica.*
74. American or white elm.	*Ulmus Americana.*
75. Scotch elm.	*Ulmus montana.*
76. European white birch.	*Betula alba.*
77. Willow oak.	*Quercus phellos.*
78. American basswood.	*Tilia Americana.*
79. Ring-leaved or curled-leaved willow.	*Salix Babylonica, var. annularis.*
80. Salmon barked willow.	*Salix alba, var. vitellina Britzensis.*
81. Dwarf Japan catalpa.	*Catalpa Bungei.*
82. White mulberry.	*Morus alba.*
83. Scarlet fruited thorn.	*Cratægus coccinea.*
84. Scentless mock orange or syringa.	*Philadelphus inodorus.*
85. Black haw.	*Viburnum prunifolium.*
86. Oval-leaved variety of the cockspur thorn.	*Cratægus crus-galli, var. ovalifolia.*

	Common Name	Botanical Name
87.	Bush Deutzia.	*Deutzia crenata.*
88.	Standish's honeysuckle.	*Lonicera Standishii.*
89.	Japan quince.	*Cydonia Japonica.*
90.	English hawthorn (Pink flowers).	*Cratægus oxyacantha.*
91.	European linden.	*Tilia Europæa.*
92.	Small leaved European linden.	*Tilia Europæa, var. parvifolia.*
93.	Tartarian honeysuckle. (Pure white fragrant flowers.)	*Lonicera Tartarica, var. alba.*
94.	Dwarf mountain sumac.	*Rhus copallina.*
95.	Mountain maple.	*Acer spicatum.*
96.	Bur or mossy cup oak.	*Quercus macrocarpa.*
97.	Paper mulberry.	*Broussonetia papyrifera.*
98.	Japan silver fir.	*Abies firma.*
99.	Smooth alder.	*Alnus serrulata.*
100.	English oak.	*Quercus robur.*
101.	Alternate-leaved dogwood.	*Cornus alternifolia.*
102.	Cedar of Lebanon.	*Cedrus Libani.*
103.	Bladder senna.	*Colutea arborescens.*
104.	Sweet viburnum or sheepberry.	*Viburnum lentago.*
105.	Hybrid variety of the tender leaved hawthorn.	*Var. Cratægus tenuifolia.*
106.	Umbel-flowered oleaster.	*Elæagnus umbellata.*
107.	Weir's cut-leaved silver maple.	*Acer dasycarpum, var. Weirii laciniatum.*

IX.

FOURTH SUMMER HOUSE TO BREEZE HILL.

On the extreme south-westerly peninsula of the Large Lake stands the fourth little Summer House or rustic shelter. It is charmingly set, half hidden by winding ways along whose wanderings the summer leaves whisper delightfully to every breeze that steals in from the Lake. From its ever open windows you can see the noble ridge of Lookout Hill and the silvering sheet of the Lake dancing to fresh breezes or perhaps stilled to a half-slumbrous dream, with quiet shadows glassed about the coves or just rippling enough to float across to your eye the dazzling flash of sparkling sun stars shot from the edges of tiny waves. Far over on the large Peninsula the weeping willows drape their vails of green, the miniature yachts careen and bend and sway, weaving and interweaving mysterious courses and all about you, as you sit here with your book, the birds call, the insects sing and the breeze sends dancing shadows of leaves to and fro over the floor and over the rustic beams of the shelter.

But let us start on our ramble. At the left of the Fourth Summer House, as we take the path, stands a pretty young European white birch, and beyond it a sturdy English cork-bark elm which in early

spring is covered along its corky-ridged branches, with closely bunched clusters of purplish flowers. Very near the end of the right hand branch of the Walk, tall and conspicuously set on the edge of the peninsula's shore, a beautiful cucumber tree lifts up its rather pyramidal form. I have often admired the tree, whether in autumn when it turns a beautiful light fawn color or in the dead of winter when it flings out the bravery of its light-gray branches, trimmed with the warm furry buds that proclaim the magnolia family, or in late May or early June when it sets its yellowish green flowers of six petals through the shades of its pointed leaves. If you get its autumn hues across the sleeping waters here, you will not soon forget the sight.

In the angle of the fork of the Walk, stands a willow-leaved variety of the European flowering ash, with long willow-like compound leaves and squat trunk of brittle gray. Just across the Walk from it, on the left of the path are some noble European silver lindens, easily known by their smooth satin-gray bark, and cordate leaves, dark green above and silvery white beneath.

Very close to the water near the spot where the cove comes up to spread its silver near the Walk, stands a tall, straight-limbed tree with compound leaves and bark that says "ash" very strongly. In it, I suppose you have recognized a fine type of the *Fraxinus excelsior* or European ash, for such it is. See how closely the leaflets set to the leaf stem, and if you have nothing better to do when you are rambling in the Park in early spring, watch for the bloom of this

tree. It throws down several convenient branches, and if you want to get a good, close view of its flowers, you will find it given most generally by this tree. It fairly spouts flowers. Look for them along in late April.

A step or so onward and our path takes a turn to the right, follows the lake shore and, skirting the southern side of Lookout Hill, runs around the large Peninsula, over Terrace Bridge to Breeze Hill.

As we swing around to the right and walk under the leafy canopies of dancing leaves, and watch the shifting fantasia of light and shade in the play of the brilliant sunshine, we find a beautiful English hawthorn standing on the left of the Walk about half way along the border of a little island of shrubbery which has come to rest in the inter-twinings of this admirably wrought landscape gardening. You know it at once by its deeply cut leaf and fine thorns. But have you seen it bloom. If not come to it in May, and look upon the loveliness of its rich red flowers. It makes a fairy picture then. Right across from it, due south, on the border of the Walk, is a hawthorn of very different leaf. This is the black or pear hawthorn, and its leaves are tough and leathery when fully grown, oval or ovate-oblong. They have a characteristic feature, especially noticeable, *i. e.*, of having the upper sides of the leaves impressed along the larger ribs or veins. The fruit of this hawthorn is about half an inch long, obovate or globose, and when ripe, dull red. On the seeds you will find furrows on the outer sides.

The path runs on, following the lake border, leading through leafy bowers, with ever changing vistas of water and islands that have come to anchor here, making witching nooks, and quiet, dreaming bays, over which the enamoured trees lean and caress with drooping branches. As you pass along, if it be in June, you will find the lovely *Laburnum,* letting down chains of golden bloom, which show very conspicuously amid its light green leaves. But if it is not in flower, you can know it by its alternate palmate leaves of three leaflets. Its leaf is very beautiful, soft and tender, and of a lovely shade of green. Its flowers develop into pods about two inches long which are ripe in autumn. You will find this laburnum easily, on the right of the Walk, a little further than half way to where the Walk next meets the water. On the left of the Walk, about opposite it, is a tall tree alder, which you know at once by its black alder "cones," all over its branches and its roundish ovate leaf cut in at the top.

Where the Walk next comes close to the water's edge stand *Kœlreuteria,* on the right, and false indigo on the left, as you face the water. Back of the false indigo is a fine fringe tree with wide-reaching branches and a splendid outburst of white fringe-like bloom in June. Turning again and passing on, at the next meeting of Walk and water, you will find quite a large clump of the Hercules's Club or Devil's Walking Stick. Just beyond it is another pear or black hawthorn and across the Walk from it, on your left as you face toward Lookout Hill, stands smoke

tree. Close by the Walk, on the left, just beyond the smoke tree are many fine bushes of the *Physocarpus* or ninebark, and beyond these, near the Drive crossing, large spreading bushes of the fragrant honeysuckle.

In the corner of the open space of Walk here, as you go on, at your right, a well grown shadbush hangs its small, finely serrated leaves over the waters, and on the rounded turn of the Walk, still on the right, you will find the cut-leaved variety of the weeping European white birch. See how beautifully its leaves are incised. A little further on is ash-leaved maple and then weeping European silver linden and European silver linden side by side. Not many steps onward and you meet another English hawthorn, which in May covers itself with the loveliest of pink double flowers.

Again the path comes down close to the Lake, and at the corner of the bank, where the sward narrows handsome clumps of the sturdy *Forsythia* hold up the shining lances of their beautiful leaves. In early spring they are among the first to set their golden bells a-chiming and they are rich sights if you get them reflected in the stream. Right back of this open space of walk, on the grass, between the Walk and the Drive, are several young yellow-woods.

As you go on, interesting studies of things botanical come thick and fast, now, all along the line of march, and we would feign linger over them at length, but space does not permit. I can only give you the hint, the filling out of which you must do yourself. On

the right, close by the water's edge, stands a large bush with several strong branches rising and spreading out over the Walk and the water, its smaller branches set with alternate, pinnate leaves, of four to six pairs of oval-oblong pointed leaflets. In it you have no doubt already recognized the Siberian pea tree, for such it is. A little while ago it was of beautiful form, but it has been sadly broken.

On the left of the Walk, opposite the Siberian pea tree are some ginkgo trees which you can easily identify by their fan-shaped leaves and branches, which seem to lean out from the main trunk at angles of forty-five degrees. The ginkgo tree has also a distinguishing light gray bark. If you know the maiden hair fern, you must see at once why this tree is called *adiantifolia,* the genus name of the maiden hair being *Adiantum.* In the first frost of autumn, the ginkgo tree does not change its foliage all at once, but little by little, with soft, yellow tints which deepen gradually inward from the margin of the leaves. The effect is that of ruffle on ruffle, like lace, all through the tree. Its name ginkgo is derived from the Japanese *ginko* or *ginkgo,* Chinese *yin-hing,* meaning silver apricot. If you have ever seen its fruit after it has been thoroughly dried, you know how well this name applies. There is one ginkgo tree in the Park, which bears fruit every year and if you wish to see it, you will find it on the left of Endale Arch, as you go from the Long Meadow to Plaza Entrance. The fruit looks not unlike a light yellow plum, but it has anything but a plum-like

smell. Indeed, its smell is something to keep far away from.

In between the ginkgo trees and to the left of them, you will find several bushes of the beautiful Japan *Stachyurus.* This bush takes its name from the Greek *stachys,* a spike and *oura,* a tail, referring to the form of its catkins. In the late days of March or early April, you may chance to be passing here and if you do, you must not overlook these bushes, for then they are hung full of beautiful bell-like flowers, drooping with great grace, in long axillary racemes or spikes. Days before the flowers break open, you will perhaps have noticed the long, conspicuous flower buds hanging thickly from the axils of its leaves.

Passing along, by the border of the Walk, on the left, very near to a silver maple and a sycamore maple, stands a well grown tree with plump trunk, rather light grayish-brown bark, and leaves so beautifully cut you love to stop and linger under their soft, light green, to admire their fineness. These leaves are round and deeply cut into long, slender pointed lobes. You probably recognize by them the *Acer circinatum* or round-leaved maple.

A little further on, with short trunk, and harsh, knobby, knotty, heavily ridged branches, you come upon another cork-bark elm, and about opposite to it, by the water's edge are large clumps of the false indigo. Along the Walk a short stretch, and you find a handsome Japan maple, on the left, and just across the Walk from it, Japan pagoda tree or *Sophora Japonica.* Then come more ginkgo trees and at a

point about opposite the end of the green "island" by the Drive, you pass, on your left, quite a cluster of sophoras. These trees' leaves may make you think of the locust. They belong to the same (*Leguminosæ* or pulse) family, flowering in great panicles of cream white in late July or early August and the flowers develop into long chain-like pods of glossy dark green.

Down by the water's edge, about opposite the group of sophoras just spoken of, you will find Camperdown elm, a fine European purple beech, with leaves of a deep dark crimson-purple, and further on, a small graceful tree of umbrella-like form, with a fine rain of slender branches decked with small, narrow, light gray green leaves. This tree is the New American Willow, a weeping variety of the purple willow, grafted on the stock of the goat willow. Its effect is full of exquisite grace. Following the bend of the shore, you meet, a little beyond, a goodly cluster of Austrian pines, all doing well and all showing off very handsomely the thick, heavy dark green foliage which is their glory.

If you come back to the Walk now, on your left, and a few feet beyond the point opposite the cluster of Austrian pines just spoken of you pass a well set group of *Kœlreuteria,* and at the very point where the greensward narrows down to meet the Drive at crossing, stands a fine young Kentucky coffee tree which you readily recognize by its scaly bark and leaves twice pinnately compound. Across the Drive here, at the extreme point made by the fork of its two

branches (one leading to Sixteenth Street Entrance and the other turning to the right to go around the Large Lake and so on to Terrace Bridge) stands, I believe, the most perfect type of Austrian pine in the Park. It is nobly set and rolls out its girth against the sky in all the glory of its strength. You cannot mistake it, for it is the only tree on the little point of greensward between the Walk and the two Drives. At the right hand corner of the Walk back of this handsome Austrian pine, close by the Drive stands a rich clump of Californian privet, very lusty and glossy in the full sunshine of a fair day.

But we will keep on along the path that wanders by the side of the Lake. As you pass along, when you have come to a point about opposite a spot halfway between the clump of Californian privet above spoken of, and a lamp-post on the Drive, down at your right, between you and the water, but nearer the Walk than the water, you will find a shrub with lance-oblong leaves. If you rub them with your fingers and then smell of your fingers, you will be surprised to find what a fragrance you have drawn from the leaves. It is an aroma once known you will never forget. The leaves are mostly entire, that is with margins not serrated or cut, and, as the season advances, grow glossy on the upper sides. Clustered in a noticeable way along its branches, you will find the berry which has given this shrub its name—bayberry or wax myrtle. The berries show quite plainly, clustered close together in little bunches. They are not

very large, smaller than small peas, and are thickly crusted over with greenish-white wax.

Just beyond the bushes of wax myrtle you will find some elegant clumps of the arrowwood or *Viburnum dentatum* which you at once recognize by their saw-cut leaves. Another Californian privet stands a few feet from the arrowwood, closer to the Walk, looking very elegant with its dark green, lance-elliptic leaves and stiffish outshooting branches. This privet turns in the autumn, a rich indigo-bronze. The Californian privet is quite different from the so-called common privet, (*Ligustrum vulgare*). The latter has a much smaller leaf, not so elliptic in shape, and of a bluish or bottle green color. You will find specimens of both kinds side by side, further on, very near the fork of the Walk, beyond the Artesian Well. But that is getting ahead of our story. As you stand beside the Californian privet just spoken of, look across, at your left, to the noble fountain-fall of leafspray dropped and suddenly held by some enchantment in mid-air which that magnificent weeping European beech holds for you over on the slopes of Lookout Hill. Is it not a beauty! Watch it when the breeze stirs it into rippling light. Silver flows down its glossy leaves in spangling flashes and if you come near to it, your ear will be refreshed with the cool whispering of its leafy music.

The Walk bends gracefully here to the right and sweeps around the base of Lookout Hill toward the Peninsula. Not far from the spot marked "culvert" on the sectional diagram, you will find a golden

barked variety of the Babylonian or weeping willow. In winter its twigs turn a rich, strong yellow, and its falling rain of trailing branches makes it like a golden vail.

Across the Drive, a little diagonally opposite the culvert stands a lamp-post, a little to the west of which are more clumps of Californian privet, and to the east of it, set off at about equal distances from each other, you will find handsome young growths of the *Magnolia Soulangeana.* One of the trees in the clump here, the second, by the Drive, beyond the lamp-post, is an umbrella tree which you recognize by its large leaves hanging in true umbrella-like form at the ends of its branches.

Beyond the umbrella-tree, on the right of the Walk, you pass a lusty young weeping bald cypress. Examine its rather chain-like growth of leaves and see how different they are from the flat leaf sprays of the bald cypress itself. The characteristic look of the weeping bald cypress is plume-like. Its branches appearing to arch gently outwards. Both trees have their own expressions and each is equally fine in its way. In some of the botanies, you will find the weeping bald cypress referred to as *Glyptostrobus Sinensis, var. pendulus* (weeping Chinese cypress). You can always tell it by its close, rather chain-like growth of leaves.

As you follow the lake side, not far from the Artesian Well, you will find a couple of young weeping European white birches drooping slender vails of beautifully cut leaves. The bark of these trees is red-

dish white against the steel-blue of the Lake. Over by the Artesian Well is a magnificent display of lilacs of over eighty different varieties. A little north-west of the lamp-post, which stands by the Drive, west of the Artesian Well, a good specimen of the ailanthus has taken firm stand.

Beyond the Artesian Well, the Walk branches into two forks. One, the left hand, follows on by the side of the Drive, and crosses Terrace Bridge to Breeze Hill. The other slopes gently down to the right and searches the most delightful arcades of greenery, the lovely nooks of the Peninsula.. If you love light and the shine of things green, the breath of dew and the song of birds, come here in June, early in the morning, when the gold of the sunlight is illuminating all the paths with an ever changing dance of sunbeams; when the grasses are all bending with the silver of the dew and sparkling diamond drops from their arching tips. The robins run over the new mown lawn, stop a bit to stare at you and then run on. The golden bee is already abroad brushing the moist lips of fragrant flowers and the quiet air is broken by the splash of leaping fish in the Lake, feeding along the dreaming coves.

We take the right hand fork and go down to the Peninsula. In its fork is Japan snowball, with easily distinguishable folded or plicated leaf, generally round but often longer than broad. Just as you have started to follow the path over the lovely green stretches of the Peninsula, you pass, on your left, a sweet viburnum which you can know at once by its very finely ser-

rated leaves. The Walk goes on to another fork and just before you come to that branch, there are some interesting things off to your right. If you have learned to know the yellow-wood in your park rambles, with its smooth, light gray bark and compound leaves of rather roundish leaflets, you will find three of them here almost in a line with each other, parallel with the Walk. Clustered close together just back of the central of the three yellow-woods, you will find some very interesting bushes with leaves which make you think of dogwood. But they are not dogwoods by any means. Look along the branchlets for the thorns you should find terminating them. These will give you the clue to their identification. They are good specimens of the common buckthorn, healthy and doing well. Look at their ovate leaves closely and you will see that they are finely serrate. The flowers of these shrubs are very small, greenish, four parted, scarcely noticeable, in clusters in the axils of the leaves, and they develop into small, black berries, which are ripe in September.

Near the Miniature Yacht Club House, a little to the left of it, you will find not far from an American elm, a young willow oak. You can easily identify it by its narrow-lanceolate leaves, which have their margins entire or nearly so. They look very willow-like, especially when young. Then they are scurfy and light green, but they soon grow smooth.

In the center of the Peninsula the Walk forks into a double set of branches, forming a kind of oblique cross. One of these forks wanders by several devious

ways, down to the very end of the Peninsula. Let us go down with it. As you proceed, you pass Californian privet, on your left, and at the point of the fork, on your right, Scotch elm and American basswood. On the point of this island of shrubbery that now meets you on your left is a good clump of dwarf Japan catalpas. Following down the right hand pathway embracing this island of shrubbery set in the encircling walk, you will find white mulberry, easily known by its glossy three shapes of leaves, and a fine scarlet fruited thorn. Another little island of shrubbery meets us as we go on, and we take the left branch of the Walk. Then we pass, on our right, beginning at the end of this island, ginkgo tree, known easily by its fan-shaped leaves, fringe tree, more ginkgo trees, yellow-wood, small leaved European linden, and Japan pagoda tree at the far or eastern end of this "island." On your left hand you have passed up to this point, English hawthorn, which bears beautiful pink flowers in May, Japan quince on the westerly point of another island of shrubbery set in here, then two fine yellow-woods with smooth gray bark, then gingko tree again and Standish's honeysuckle on the easterly end of this "island," just opposite the Japan pagoda tree on the easterly end of the other "island."

We are through the "islands," so gracefully set in the paths here, and the Walk loiters on in easy windings to the extreme end of the Peninsula. If you go on with it, you find two pretty black haws a little further along, standing about opposite each other, and beyond these, on your right, as you go easterly,

you will find a very beautifully leaved hawthorn standing modestly by the bend of the path as it makes its last turn, which is to the right. This is a hybrid of the *Crataegus tenufolia.* Beyond it is Californian privet, and, at the very end of the Walk, a beautiful hawthorn with dark oval glossy green shining leaves and large thorns. This is the oval leaved variety of the cockspur thorn and in its way it is a little beauty.

Let us turn around now and go back, but instead of quite retracing our steps, follow the right hand border of the path until it meets the Walk which comes from under Terrace Bridge. About opposite the Japan pagoda trees, which we passed on the way down, you will see a good bush *Deutzia.* Beyond the *Deutzia* is *Kœlreuteria.* Right out across from these, if you care to push through the grass to the water's edge, you will find two specimens of the umbel-flowered oleaster (*Elæagnus umbellata*). You cannot miss them. Their leaves are elliptic or oblong ovate, crisped about the margins and silvery white on the undersides, often marked with a few brown scales. Having taken a detour to see these, we go on, following the right hand border of the Walk.

Near the spot where the Walk comes down close to the water, there are some interesting things to pause over for a few moments at least. If you stop at the middle of the open stretch of path, and face the water, due north, you will have upon your right two beautiful English hawthorns, one of them bearing light reddish or pink flowers in May. On your left, very close to the water are some salmon barked varieties of the white

willow. You see that they have the leaf of the variety *vitellina* (the golden willow), but their barks are very different from that of *vitellina,* as you will see if you come to them in the winter. As winter approaches these trees change their barks first to brassy gold, then to pink and then to crimson-pink. Next, to the left of the salmon-barked willows, standing a little back from the Walk is a very peculiar looking sapling, with leaves curiously curled and twisted into ring-like wreathings. This is the curled-leaved or ring-leaved willow, and it is a variety of the weeping willow.

If you turn to the west now and follow the path's right hand border, it will lead you around the shore of a little arm of the Lake nestled here. When you come to a point where it (the Walk) makes its last junction before meeting the path from under Terrace Bridge, you will find three fine clumps of the Reeve's spiræa. Back of them stands a golden barked weeping willow. Side by side, on the point that juts from the shore just back of the willow are two fine specimens of the Lombardy poplar.

Continuing along the path, which has turned from a westerly to a northerly direction, you pass golden barked weeping willow, common elder, false indigo. Then comes an open stretch and laurel-leaved willow, glossy and shining; false indigo again, mixed in with *Cornus stolonifera;* and then French tamarisk. Just beyond the last fork of the Walk you should notice the fine cluster of European spindle trees which stand grouped together in cozy gatherings on the right of the Walk. They make a fine showing in the frosty days of early autumn with their brilliant crimson fruits,

the husks of which curl back and show the orange tinted seeds.

Now we turn at the last fork, sharply to the left and go up the Walk that climbs the hill to meet the Walk beside the Drive which passes over Terrace Bridge. Just as this path joins the drive walk, there is a very beautiful cluster of European mountain-ashes. Just before you come to these, notice on your right, the handsome little maple standing near one of them. You will find it easily by its leaves which are chiefly five lobed with the lobes acuminate. The leaves have a rather truncate base. It is one of the rarest maples in cultivation and is the *Acer truncatum* or maple of Northern China.

As you meet the drive walk, turn to your right and follow it over Terrace Bridge. Notice on your right as you go along the handsome dark-purple-leaved variety "Geneva," of the Norway maple. Don't mistake this for the Schwedler's maple. You will find excellent specimens of the Schwedler's maple as you enter the Park from Ocean Avenue. They stand on the Walk in front of the right hand path as you enter the Park. The Schwedler's leaf is larger and turns greenish as the season advances. Further along the drive path, you pass black cherry and as you come near Terrace Bridge, a small oak tree of noticeably pyramidal form. It is the pyramid oak and its leaves tell you that it is a variety of the English oak. Beside the pyramid oak, nearer the Bridge, you find common locust.

Across the Bridge, just back of the lamp-post which stands as a beacon by the pathside, the rich glossy

stem-winged leaves of the dwarf mountain sumac detain your eye. How lovely they are in autumn when the frost sets them glowing in rich cool crimsons. The staghorn and the smooth sumacs turn a bright brilliant scarlet crimson, but the *copallina,* smoulders with a less intense flame and holds its fire longer. Down the hillside a little, at your right you will find not far from the winding Walk that creeps out from under the Bridge and loiters easily along the lake border of Breeze Hill, a pretty young mountain maple, with leaves of three (sometimes five, but rarely) coarsely serrate lobes and base slightly cordate. The lobes are taper pointed. If you are passing this shrub in June, look for its delicate spikes or panicles of greenish yellow flowers. Below the mountain maple, close by the Walk, you will find tiger's tail spruce (*Picea polita*) with leaves stiff enough to identify it easily. Coming back to the Walk beside the Drive, in the fork of the Walk just beyond the lamp-post, stands a bush of the white flowered variety of the Tartarian honeysuckle and if you follow on to the Old Fashioned Flower Garden which crowns the summit of Breeze Hill you pass, about half way there, a little off from the Walk, at your right, a lusty young specimen of the Japan silver fir. It is about four or five feet high, with strong stiff branches and leaves of marked individuality. You cannot mistake them. They are about one inch long and grow very closely two-ranked with a noticeable twist at the base where they join the branch. Moreover they are distinctly notched at the ends, are smooth dark green on the upper sides and rather silvery beneath.

A kind of mushroom shaped shelter has taken up its abode near the westerly end of the Old Fashioned Flower Garden and about opposite it are several noble Kentucky coffee trees, glorying in scaly bark and sweeping foliage. Beside the more easterly of this group you will find an interesting shrub, bladder senna. You can know it by its compound leaves, made up of from seven to eleven oval and somewhat truncate leaflets. In summer it hangs full of yellow flowers which change into peculiar bladder-like pods.

Go back a little now to the spot where you found the white Tartarian honeysuckle and follow the right hand fork of the Walk which goes down the mid-slope of the hill. Not far from the junction of the Walk, a stalwart old mossy-cup or bur oak, hangs over your head, from the right of the Walk, large leaves with characteristic deep sinuses about opposite each other near the middle of the leaf, plainly speaking "macrocarpa." If you have never seen the acorns of this oak make haste to find one and see how it frouzles all over the nut, with a twisted fringe that in many cases quite covers the acorn. This feature has given it the name overcup oak and well does it merit it.

Directly down the slope of the hill from the bur oak on the path below the one you now stand on, near a point where the Walk comes close to the water, you will find, if you take a run down there, some very well grown young paper mulberry trees. The paper mulberry has a very characteristic bark and when you get to know it, you can pick it out quite a little distance away. Its bark is a light pinkish gray and at intervals

along its stem it is marked with darker tinges of gray, which give you the idea of bands put around the trunk. But if the bark fails to fix it for you, look at the ovate or heart-shaped leaves, which are lobed variously, like the usual mulberry leaves, mitten form, with the thumb on either side or perhaps both thumbs on the same mitten. The leaves are very rough on the uppersides but soft and downy on the undersides. The flowers of this tree are not very striking. They occur in inconspicuous greenish catkins in the spring. On old trees the leaves are scarcely lobed at all.

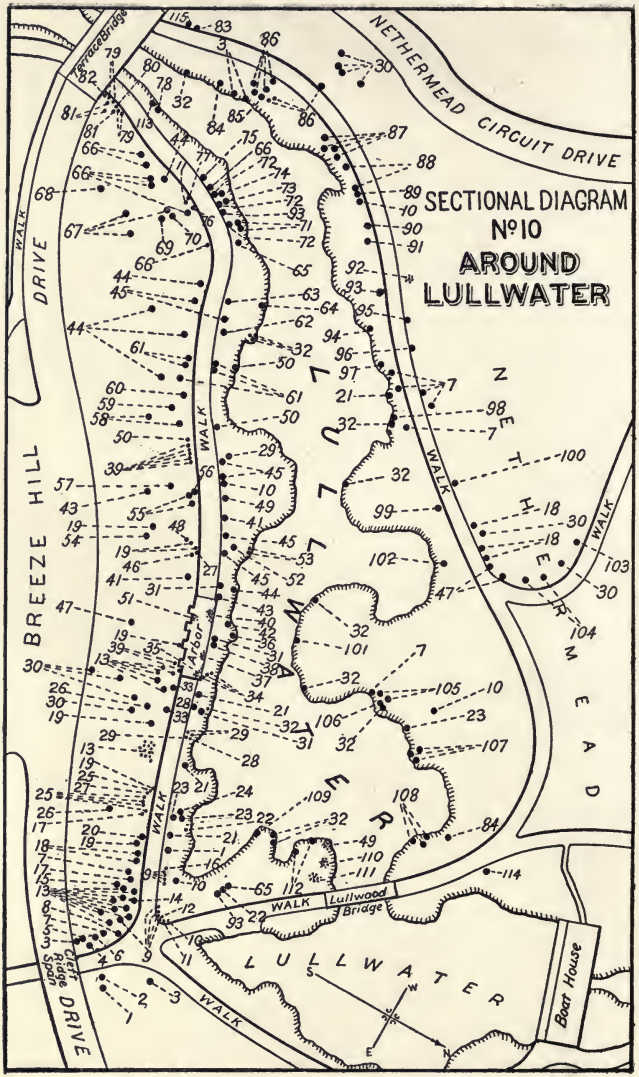
Push on from the paper mulberries a little and strike off from the path to the lake border. At a point there, about opposite the Japan silver fir, on the upper Walk of the hill, you will be delighted to see a good specimen of the smooth alder. Its little black "cones" hanging all through it tell you it is "alder" and its thick, finely serrate, smooth leaves, green on both sides, tell you it is the *Alnus serrulata*. The leaf is obovate in shape, acute at the base, but its margin is very finely serrate.

Go up the hill again now to the middle path and see if you can find the alternate-leaved dogwood which stands near the Walk a little way along. You will know it first of all by its alternate leaves. But its bark, quite different from that of the flowering dogwood, is ashy gray. Its leaves are noticeably taper pointed. If you are passing near here in late May, you may see its flowers, in large white flat cymes. These change into bright blue berries on reddish stalks.

This dogwood stands about opposite a fine English oak on the other side of the Walk.

A little south-west of the alternate-leaved dogwood you will see a pine tree that looks something like an Austrian pine, but you can tell at once that it is of finer, more elegant appearance. Its leaves are longer and much more slender than those of the Austrian pine. If you will examine these leaves with your hand-glass you will see that they are concave on the undersides and convex on the outer. The pine is Japan pine (*Pinus densiflora*), and its long, slender leaves give its branches a sweeping, rich look quite different from the stiff bunching appearance of the Austrian.

Just beyond the English oak, opposite the alternate-leaved dogwood, spoken of above, stands an exceedingly interesting tree which will be the last we consider in this ramble. It is a young Cedar of Lebanon and it is flourishing in true form. You will know it at once by its fine feathery look. If you examine its foliage closely, you will see that its needles are rather rigid, of a deep green color and gathered together in pretty rosette-like fascicles or bundles along the branches. The leaves look larch-like, but they are evergreen while larches are deciduous. Notice also the straight out horizontal reach of the whorled branches and the little upward tilting of the terminal branches. It is a beautiful young tree and it is to be hoped that it will do as nobly as its kinsman *Cedrus*, the *Cedrus Atlantica* over on the north-eastern slope of Lookout Hill.


SECTIONAL DIAGRAM
Nº10
AROUND
LULLWATER
NETHERMEAD CIRCUIT DRIVE
BREEZE HILL DRIVE
LULLWATER
NETHERMEAD
LULLWATER
Terrace Bridge
Arbor
Lullwood Bridge
Cleft Ridge Span
Boat House
WALK
DRIVE
S
W
E
N

Explanations, Sectional Diagram No. 10

Common Name	Botanical Name
1. Josika or fringe-tree-leaved lilac.	*Syringa Josikæa.*
2. Bush Deutzia.	*Deutzia crenata.*
3. Camperdown elm.	*Ulmus montana, var. Camperdownii pendula.*
4. Tree box or boxwood.	*Buxus sempervinens.*
5. Bhotan pine.	*Pinus excelsa.*
6. Polish juniper.	*Juniperus communis, var. Cracovia.*
7. Hemlock.	*Tsuga Canadensis.*
8. Gregory's Norway spruce.	*Picea excelsa, var. Gregoryiana.*
9. Large-flowered syringa.	*Philadelphus grandiflorus.*
10. Silver maple.	*Acer dasycarpum.*
11. Japan quince.	*Cydonia Japonica.*
12. White-stamened syringa.	*Philadelphus nivalis.*
13. Rhododendrons. (Various kinds.)	
14. Mountain laurel.	*Kalmia latifolia.*
15. Common elder.	*Sambucus Canadensis.*
16. Fly honeysuckle.	*Lonicera xylosteum.*
17. Japan mahonia or ash-berry.	*Mahonia Japonica.*
18. Mugho pine.	*Pinus montana, var. Mughus.*
19. European or English yew.	*Taxus baccata.*
20. Rhododendron. (Rosy lilac colored flowers.)	*Rhododendron, var. everestianum.*
21. Red maple.	*Acer rubrum.*
22. Common sweet pepper bush.	*Clethra alnifolia.*
23. English field maple.	*Acer campestre.*
24. Sugar maple.	*Acer saccharinum.*
25. Tree box or boxwood.	*Buxus sempervirens.*

Common Name	Botanical Name
26. White pine.	*Pinus strobus.*
27. Japan yew.	*Taxus adpressa.*
28. Golden bell or Forsythia.	*Forsythia viridissima.*
29. Weigela.	*Diervilla amabilis.*
30. Austrian pine.	*Pinus Austriaca.*
31. Bald cypress.	*Taxodium distichum.*
32. Yellow or golden willow.	*Salix alba, var. vitellina.*
33. Japan ground cypress or Japan arbor vitæ (Plume-leaved).	*Chamæcyparis* (or *Retinospora*) *pisifera, var. plumosa.*
34. American bladder nut.	*Staphylea trifolia.*
35. Five-leaved akebia.	*Akebia quinata.*
36. English elm.	*Ulmus campestris.*
37. Wistaria. (White flowers.)	*Wistaria Sinensis, var. alba.*
38. Spicebush.	*Benzoin benzoin.*
39. Slender Deutzia.	*Deutzia gracilis.*
40. Japan Wistaria. (Dark purple flowers.)	*Wistaria multijuga.*
41. Oriental spruce.	*Picea orientalis.*
42. Hackberry or sugarberry.	*Celtis occidentalis.*
43. European larch.	*Larix Europæa.*
44. Copper beech.	*Fagus sylvatica, var. cuprea.*
45. Van Houtte's spiræa.	*Spiræa Van Houttei.*
46. Common elder.	*Sambucus Canadensis.*
47. Cephalonian silver fir.	*Abies Cephalonica.*
48. Tree celandine.	*Bocconia cordata.*
49. Fringe tree.	*Chionanthus Virginica.*
50. Black cherry.	*Prunus serotina.*
51. Grecian silk vine.	*Periploca Græca.*
52. Red osier.	*Cornus stolonifera.*
53. Cut-leaved European elder.	*Sambucus nigra, var. laciniata.*
54. American holly.	*Ilex opaca.*
55. Mountain laurel.	*Kalmia latifolia.*
56. Andromeda. (Axillary flowers.)	*Andromeda axillaris.*
57. Small mockernut hickory.	*Carya microcarpa.*
58. Sweet buckeye.	*Aesculus flava.*

Common Name	Botanical Name
59. Red-flowering horse-chestnut.	*Aesculus hippocastanum, var. rubicunda.*
60. Sweet bay or swamp magnolia.	*Magnolia glauca.*
61. Umbrella tree.	*Magnolia umbrella.*
62. American white ash.	*Fraxinus Americana.*
63. Cucumber tree.	*Magnolia acuminata.*
64. American hornbeam.	*Carpinus Caroliniana.*
65. Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
66. Common locust.	*Robinia pseudacacia.*
67. Purple beech.	*Fagus sylvatica, var. atropurpurea.*
68. Tulip tree.	*Liriodendron tulipifera.*
69. Honey locust.	*Gleditschia triacanthos.*
70. European spindle tree.	*Euonymus Europæus.*
71. White poplar or abele tree.	*Populus alba.*
72. Reeve's spiræa.	*Spiræa Reevesiana.*
73. Black haw.	*Viburnum prunifolium.*
74. Shadbush, June berry or service berry.	*Amelanchier Canadensis.*
75. Flowering dogwood.	*Cornus florida.*
76. Bush cranberry.	*Viburnum opulis.*
77. Huckleberry.	*Gaylussacia resinosa.*
78. Royal white willow.	*Salix alba, var. regalis.*
79. Arrowwood.	*Viburnum dentatum.*
80. Bay or laurel-leaved willow.	*Salix pentandra* (or *laurifolia*).
81. Blue willow.	*Salix alba, var. cærulea.*
82. Intermediate-leaved Forsythia.	*Forsythia intermedia.*
83. Weir's cut-leaved silver maple.	*Acer dasycarpum, var. Weirii laciniatum.*
84. Red oak.	*Quercus rubra.*
85. Lilac. (White flowers.)	*Syringa vulgaris, var. alba.*
86. Lilac. (Purple flowers.)	*Syringa vulgaris.*
87. Osage orange.	*Maclura aurantiaca.*
88. Hop hornbeam or ironwood.	*Ostrya Virginica.*
89. Wayfaring tree.	*Viburnum rugosum* (or *Viburnum lantana*).
90. English hawthorn.	*Cratægus oxyacantha.*

Common Name	Botanical Name
91. Norway spruce.	*Picea excelsa.*
92. Common elder.	*Sambucus Canadensis.*
93. European or tree alder.	*Alnus glutinosa.*
94. Bay or laurel-leaved willow.	*Salix pentandra* (or *laurifolia*).
95. European hornbeam.	*Carpinus betulus.*
96. Tree box or boxwood.	*Buxus sempervirens.*
97. Striped maple or moosewood.	*Acer Pennsylvanicum.*
98. European hazel.	*Corylus avellana.*
99. English elm.	*Ulmus campestris.*
100. European hornbeam.	*Carpinus betulus.*
101. American or white elm.	*Ulmus Americana.*
102. Red mulberry.	*Morus rubra.*
103. Fern-leaved beech.	*Fagus sylvatica, var. heterophylla.*
104. European silver fir.	*Abies pectinata.*
105. American larch.	*Larix Americana.*
106. Weeping European silver linden.	*Tilia Europæa, var. argentea* (or *alba*) *pendula.*
107. European larch.	*Larix Europæa.*
108. American chestnut.	*Castanea sativa, var. Americana.*
109. Babylonian or weeping willow.	*Salix Babylonica.*
110. Large-racemed dwarf horsechestnut.	*Pavia macrostachya.*
111. Dwarf Japan catalpa.	*Catalpa Bungei.*
112. European flowering ash.	*Fraxinus ornus.*
113. Purple willow.	*Salix purpurea.*
114. Big shellbark or kingnut hickory.	*Carya sulcata.*
115. Purple willow.	*Salix purpurea.*

X.

AROUND LULLWATER.

One of the loveliest rambles in the Park lies through those winding vistas of trees and water which the architect has wrought into "Lullwater." It is well named, for the water seems hushed to sleep in cozy coves and inlets. It is so shut off and retired that it has a charm of seclusion all its own. Here in the early morning the gold fish swirl and leap as they feed and break the dreaming waters with quick splashes. Here the sunshine pours down and puts a glory of quivering and illumined green before your eyes. In the Arbor here you can pass enchanted hours, watching the sweep of the kingbird or listening to the soft knocking call of the yellow-billed cuckoo. The boats glide by, reflecting, in dancing vines of light and shade along their polished sides, the tremble of the sunbeams on the waters. The robins send down querulous calls from the living green about you, and the soft cottony clouds float over the tree tops, in the purest of white. The breeze comes at times touching the waters with feet of silver and sets all the leaves on fire with a flame of white light which sweeps through them in swift showers like sudden rain. Come here when you will, it is always beautiful; be it in spring when the new greens are hanging their illumined beauties

to the sun, or in summer, when the leaves are rustling to warm breezes, or in autumn, when the crimsons and golds paint the frost stilled waters, or in winter, when the white fingered snow tucks in the fallen leaves and smooths over all its silence and purity.

In this ramble through Lullwater we start at the Arch, Cleft Ridge Span, leading from the Flower Garden and, turning to the left, follow the path along the banks of the stream to Terrace Bridge; cross the Bridge and return through Lullwater by the path on the other side of the stream, passing over Lullwood Bridge and so back to Cleft Ridge Span.

On passing through the Arch there are a few things to note on our right hand and then we will follow the Walk which leads off at the left and wanders along the eastern side of Lullwater.

Well up on the bank, on the right is a fine high bush which in June, is hung full of beautiful bell-like flowers of the purest white. By a careless observer, it might be taken, out of bloom, for a syringa, but it is quite different as you see by looking closely at its leaf. It is *Deutzia crenata* and you will find many handsome clumps of it all over the Park. Just back of this bush, you will find another very interesting shrub. As you look at it you are at once struck with the remarkable resemblance of its leaves to those of the fringe tree (*Chionanthus*). Indeed, this resemblance has given it one of its familiar names, "fringe-tree-leaved lilac." If you have any doubts about its being a lilac, stand before it some June day and you will see it throwing up handsome panicles of white

flowers that at once say "lilac" to your discriminating eye. It is the *Syringa Josikæa* or the Josika lilac and gets its botanical name from the Baroness von Josika who discovered its parent stock in Hungary. It is certainly very handsome and there are many bushes of it in the Park. Some of them bear deep purple flowers, much deeper in hue than those of our common lilac. Do not confuse *Syringa,* the generic term of lilac, with *Syringa* which is botanically known by the name *Philadelphus.*

Of course, you at once recognize the very handsome Camperdown elm at the turn of the Walk as it bends to go over to the Boat House. You no doubt have already learned the look of its leaf, rough dark green, broad across the top and ending in beautiful points which shoot out conspicuously from its heavy serrations. The umbrella-like form of this tree is enough to mark it, but learn to know its leaf. Notice, too, its kinship of leaf with the Scotch elm.

Now let us go back a little and begin at the left of the Arch. High up on the bank, there is another Camperdown elm and close beside it a well grown Bhotan pine. It is easy to know the Bhotan by its tassel-like foliage. Close down by the Walk is box or box-wood (*Buxus sempervirens*). In early spring look for its interesting little flowers in sessile bracted clusters closely set in the axils of the thick, entire, opposite, evergreen leaves. Beyond the box, is Polish juniper, differing from common juniper in its thick bunchy cluster-like leaf growth and shorter, stiffer needles. That it is juniper, you easily know by examining its

leaves which grow in whorls of three and are silvery glaucous on the upper sides. The stem of this shrub looks not unlike that of the red cedar, dark reddish brown, with its bark in strips and shreds. Beyond the Polish juniper is common hemlock and beyond the hemlock, close to the Walk, like a hemisphere of cushioned evergreen is a beautiful bunch of dwarf Norway spruce, of the variety Gregoryana, (*Picea excelsa, var. Gregoryana*). You cannot mistake it. Its form alone identifies it. Stoop down and look at its close, compact foliage. It is a beauty. Just as the Walk bends to the left here, you will find a fine bush of the *Philadelphus grandiflorus* and quite a clump of it on the opposite corner of the Walk. In June it is filled full of fragrant white petaled and yellow stamened flowers. Just behind the middle of the clump on the right hand corner of the Walk, you will find a variety with *white* stamens. This is *Philadelphus nivalis* and the effect of its bloom is indeed "snowy."

A little further along on the left and extending back up the slope of Breeze Hill, a little, is a fine cluster of rhododendrons of various kinds. Those breaking out white trusses of bloom are *Rhododendron album elegans* and, with very large white truss, *R. album grandiflorum;* cherry red, *Charles Bagley;* rose lilac, *Everestianum;* dark crimson, *John Waterer.* The great bay, *Rhododendron maximum,* carries large bunches of pink and white blossoms in late June and early July. It is broad-leaved. Close to the Walk, mixed in with rhododendrons is a clump of mountain laurel (*Kalmia*

latifolia) which you may know from the rhododendrons by its much smaller lance-ovate leaves, green on both sides. The leaves of the rhododendrons are much longer and more oblong-lance shaped, not unlike the look of the magnolia-leaf. Of course if you meet them in bloom it is very easy to distinguish them, for the *Kalmia* has umbel-like clusters of small saucer shaped flowers while the rhododendron has a large bell-shaped funnel-form corolla, entirely different. The laurel has a queer way of concealing its stamen-heads or anthers in little pockets in the corolla and when the visiting insect touches these they fly out on elastic filaments and bombard it with pollen. The rhododendron has long stamens (five to ten in number), very conspicuously set from the corolla and often curved to the lower side.

Beyond the clump of rhododendrons is a good bush of elder, and beside the elder, broad, spiny, *Mahonia Japonica,* of the barberry family. The latter has pinnate light green leaves and clustered racemes of yellow flowers in the early spring. The leaves brown in winter. About opposite the elder and *Mahonia,* on the other side of the Walk is a clump (four bushes) of syringa (*Philadelphus grandiflorus*) and just beside the last bush of syringa is fly honeysuckle, (*Lonicera xylosteum*). You know it at once by its soft, very downy (when young) leaves, rather heart shaped and hairy on the edge. It bears yellow flowers in May, with nearly equal lobes and a very unequal sided base, which gives the flower a two-lipped appearance. The flowers develop into beautiful red berries.

On the right of the Walk again, we come to two Mugho pines which you will have no trouble in knowing from their dwarf prostrate forms of growth. Some adverse fate seems to have befallen the Mugho pine, for it looks as if it had been beaten down upon the head so continuously that it abandoned long ago any idea it may have had of being a tree and decided to stay a humble, rambling bush. I like its tough form and its close tenacious grip, for somehow, as I pass it, I seem to see the Alp winds beating and buffeting its close dense head, whistling through its needles, but never rooting it from its eagle-like claw upon the soil. Each shrub and tree brings with it its heredity even in the Park, and he who carries an imagination with him in his Park walks, will travel through many countries, passing from clime to clime. This is one of the things which makes a Park stroll so interesting. The Bhotan pines whisper of the Himalayas, the Caucasian walnut of Russia and the trans-Ural district, the Austrian pines of the Alps and the Tyrol, hosts of things of China and Japan. Many lands are compressed into the few hundred acres which make the city park, and they are there for whomsoever will come to see them. Just consider for a moment what this means, what you have within reach of a trolley car. Truly a park is a wonderful place and if you love to know the garnitures of God's earth in their myriad forms walk here and see some of the beautiful growths of lands so distant as to seem almost dream-like.

Beyond the Mugho pines is a goodly English yew

and next to it a well grown rhododendron of the variety *Everestianum.* About opposite the yew is another fringe-tree-leaved lilac (*Syringa Josikæa*) and about opposite the *Everestianum,* red maple and close by the water, a clump of the sweet pepper bush (*Clethra alnifolia*). The *Clethra* you know by its leaf alone, serrate along its upper part and entire along its lower part. As you remember it bears long white fingers of bloom in July. Beyond the *Clethra* nearer to the Walk are two well grown English field maples (*Acer campestre*), known at once by the square-cut lobes of their leaves.

On the left of the Walk again, opposite the two English maples you find *Mahonia Japonica* again and then four well-grown boxwood trees with their close-set lifeful-looking leaves. See them in winter with the crystalline sunshine of the morning silvering them over with a dazzling brilliance and you will not be sorry you came. Many a winter's ramble have I had through here with the box all glorified in the down-pour of the sun's splendor, with the snow breaking away from the boughs of the neighboring evergreens in gentle little puffs of white, with that wondrous mysterious living silence of winter filling the air, broken only save by the muttered rumbling of the ice or the whispering of wind-driven snow.

Beside the last of the box clumps here, we meet a very interesting shrub. Notice its leaves, see how closely squeezed they are. This is the so-called Japan yew, but as Gray says, probably but a variety of the English yew. Its botanical name is *Taxus adpressa,*

or in other words, yew, with closely appressed leaves. See how well it has been named. How different its thick short blunt leaves are from the sharply pointed leaves of the English yew. You can pick it out by its close-set leaf spray for a certainty. If you happen to pass it in early autumn you may chance to see its beautiful red-pink seed cups hanging brightly all through its dark green, like little bells. In the center of the cup is the seed, black brown. This cup is the sign of the yew family. There are many choice things in this section of the Park and this is one of them. There is another fine clump of it further along beyond the Arbor.

Beyond the Japan yew is box again and beyond the box, English yew. This English yew is pretty well grown and is a good type of the genus.

A little further along you come, on the left, to a clump of rhododendrons and about opposite these, on the right, is a well grown red maple. Passing on, there are bushes of the rosy pink *Weigela* (*Diervilla amabilis*) and just back of the *Weigela,* a clump of the golden bell or *Forsythia viridissima.* The *Forsythia viridissima* has rather lance-like leaves. Further on, on the right, we meet another *Forsythia viridissima* and beside it, toward the Lake, bald cypress (*Taxodium distichum*). Notice the feather-like leaves of the bald cypress. The bald cypress is surpassingly lovely at two seasons of the year—in spring, when its tender green makes your heart go out to it, and in autumn, when it waves a plume of softest old-gold and brown against the sky. It is tall and spire-like of

growth and deciduous in habit dropping its leaves in late autumn. Even in winter it has a beauty of its own when it spreads against the quivering and golden splendor of a winter's sunset the wirework of its delicate branches. What eloquence in such a sight! The hush, the winter stillness, the mute lakes stretched in steels armored against the wintry winds, no one in sight, the plaintive call of a kinglet and back of the bare branched bald cypress a tremulous sea of golden sky!

But we cannot spend so much time on the bald cypress. Beside it, near the water, is a white willow of the variety *vitellina*. The glory of this tree is in the winter. Then its twigs turn a conspicuous brassy yellow. You can see them afar off through the maze of the gray-brown branches of its neighbors. Beyond the *Forsythia* here is a red maple and then we have come to the Arbor. On the left, from the last mentioned clump of rhododendrons, we have passed English yew, Austrian pine, white pine. The white pine you can know by its horizontal branches of bright light green foliage. By the Walk, in almost straight line from the white pine is a lovely *Retinospora plumosa*. Just stop a bit and look at the fineness of its leaf spray. Is it not exquisitely wrought, so fine and so feathery? Up the hill there are several Austrian pines easily known by their thick-set, chunky growth and dark green tufted foliage. The Walk draws us along, and we soon come to the Arbor.

The Arbor has many things of interest to show us. If you stand in the middle of it and face the Lake

in the far right hand corner of its trellised roof is a clustered vine which by its five leaves you recognize at once as *Akebia quinata.* The pretty climber is quite frequent in the Park, and you should get to know its five oval or obovate leaflets distinctly notched at the end. Its leaves are almost clover-like. This beautiful Japan vine, in early spring, breaks into bloom with rich plum colored flowers. At the far right hand corner of the Arbor, toward the hillside, and back of the first seat, are clumps of *Deutzia gracilis.* Behind the second seat is a good English yew. Overhead, woven through the trellis, is a lovely *Wistaria* which in May and June lets down long racemes of very fragrant white flowers. Near the far left hand end of the Arbor as you face the water, the trellis is hung with *Wistaria* bearing deep purple flowers. Very nearly overhead from the last seat of the left hand end of the Arbor the Grecian silk vine (*Periploca Graeca*) twines its smooth ovate pointed leaves. In June this pretty vine blooms with small greenish yellow flowers in lateral cymes. The upper side of the oblong lobes are brownish-purple.

Just in front of the Arbor are several things to claim your interest. Before its far right hand corner, where the *Akebia* twines, you will find three bushes in one, two, three order, side by side, toward the Lake. These are the three-leaved or American bladder-nut (*Staphylea trifolia*). Their flowers are very beautiful. In purest of white, they hang in raceme-like clusters at the ends of the branchlets of the season. They break out in early spring. Opposite the middle of the Arbor

stands a well grown spice bush (*Benzoin benzoin*) known at once by its spreading dusky, blackish branches speckled with whitish patches. The spice bush blooms early, a little later than the Cornelian cherry and sets its flowers in little close clusters of yellow along its bare branches. Next to the spice bush stands another bald cypress. North-west from the bald cypress, close to the water's edge, is a sturdy English elm of heavy trunk and oak-like growth. Next beyond the English elm, overhanging the water is a hackberry. If you had nothing else to know it by except its bark that would be enough. Look at the base of its trunk. Those knots and ridges are enough to identify any hackberry. They are always present. At the north-western corner of the Arbor you will find European larch, not doing very well here for some reason, and beyond the larch, another bald cypress. These are on the right of the Walk.

Not very far from them, as you go on, there is a clump of the Van Houtte's spiræa and a little to one side of it, a bush of the red osier (*Cornus stolonifera*). Notice the reddish stems of this bush. In winter they are bright crimson. Its leaf shows its kinship with the dogwoods. In the early summer it flowers with flat white corymbs and these develop into lead colored berries. You cannot mistake this bush if you examine its twigs. These towards their ends are very reddish and streaked with crinkly lines of light gray. Almost opposite the red osier, leaning out over the water from its foothold on the very edge of the bank is a fairy shrub, all lace and fineness. This is the cut-leaved

European elder (*Sambucus nigra, var. laciniata*). You can know it by its leaf alone. It makes you think of the graceful arabesques of Moorish decorations. One leaf of it would serve as an exquisite model for artistic designing. Hanging here over the water it seems to float on the air. Try to see it in June, when, through all its lace, it sets the feathery fineness of its white flowers. Beside the Walk again, further along, we come to Van Houtte's spiræa again. Then we meet Oriental spruce, tall, pyramidal, with beautiful dark green foliage whose deep shadows seem full of sweetly melancholy thoughts. Beyond the spruce is a fine fringe tree and beyond the fringe tree, silver maple, two more clumps of *Spiræa Van Houttei,* then *Weigela,* (a little back of the second bush of *Van Houttei*) and then black cherry. This black cherry stands by the Walk, where the water curves in close to the bank.

Up to this point, on the left, you have passed (from the Arbor) Oriental spruce, American elder, and two English yews quite close together. They stand about opposite the *Cornus stolonifera.* Just beside the first English yew here, nestling close to it is Japan yew (*Taxus adpressa*) and beyond the second yew is an interesting herb from China, *Bocconia cordata,* named from Bocconi, an Italian botanist. It rises on tall stems and carries very odd looking round-cordate lobed leaves, thick, veiny and glaucous. In late July or early August it is in bloom, and then you may see its large spikes of white or rose-white flowers very showy and very beautiful in their fineness. It is certainly very pleasingly set here, foiled by the dark

green of the yews. Back of the *Bocconia,* up the hill, is an excellent growth of American holly (*Ilex opaca*) and just beyond the holly, down the hill a little, is another English yew. There are goodly clumps of mountain laurel in here and in June they are in full bloom. You will find two of them opposite the fringe tree on the other side of the Walk. Almost beside the second clump of laurel you will find a good specimen of *Andromeda axillaris.* This shrub is lovely in early spring when it sends out flowers, on curving stems, in long rows of little white bells like lilies-of-the-valley. These droop on either side of the middle flower stem.

Up the hill, back of the *Andromeda,* is a tall hickory with rather close bark and small fruit. Its leaves are made up of five and seven leaflets, long pointed, finely serrate and smooth. It is the small mockernut hickory *Carya microcarpa.* Up the hill a little further back is European larch.

Back to the Walk again, only a few feet beyond the *Andromeda* you pass a row of *Deutzia gracilis.* They make a graceful picture when in height of bloom, certainly well meriting their name.

Now we have come to that part of the Walk where the water bends close to it in a deep sinus, and as we go on, about opposite the black cherry, on the right, we have, on the left, an interesting tree. It is the sweet buckeye (*Aesculus flava*) and there is another back of it, up the hill a little, standing knee-deep in the waving grass. You can know this tree by its compound leaves of from five to seven leaflets,

pointed, smooth, elliptical and finely serrate. It has yellowish-white flowers in late May or early June.

Beyond the *flava,* we meet a handsome red-flowering horse-chestnut. Its leaves tell you at once that it is of the common horse-chestnut family. But it is no common tree. In full bloom it is a lovely sight. Its flowers are a soft rose-red, and the tree in the full burst of its bloom, glows afar off like a torch. Next to this tree stands a graceful young sweet bay or swamp magnolia (*Magnolia glauca*). You can distinguish it easily by turning over its tender leaves of light green and looking at their undersides. That pale whitish cast of color is decisive and says distinctly "glauca." Its flowers appear late, from June to August, and they are round, white and exceedingly fragrant. Further on a little, on both sides of the Walk, are clusters of umbrella trees (*Magnolia umbrella*). You have, by this time, grown to know their large paddle-shaped leaves.

Back of the first of these, on the left of the Walk, stands a handsome copper beech. There are several copper beeches along here and you can contrast their hues with the deep crimson tints of the purple beeches further on. These trees are of marvelous beauty in the spring and be sure to see them. I know of no handsomer ones in the Park than those right here. Get the sun through them and you will appreciate their differences of color.

Further along, we meet, on the right, American white ash and down on the point of the bank, leaning out over the water, gathered together in a close

clump, are some yellow or golden willows (*Salix alba, var. vitellina*). Next to the white ash is another clump of Van Houtte's spiræa and a similar bush on the other side of the Walk (the left) about diagonally opposite. Then we come to cucumber tree, on the right, and, by the water's edge American hornbeam. On the left, we have another copper beech. Beyond, on the left, we pass common locust, and still further along, bush cranberry with large goose-foot leaves and bright red berries in late July or early August. Back of the cranberry is another common locust, with fine tender green, pinnately compound leaflets. You will know it for a certainty if you find the thorns on its branches. Still further back, up the slope of the hill, is a clump of the European spindle tree or *Euonymus*. Be sure to see it in autumn when it breaks open its conspicuous richly crimson, generally four-lobed fruit. It is very marked then and well worth seeing. It blooms in May with odd looking greenish white flowers, which are scarcely noticeable. If you notice its branches you will see that they are peculiarly marked with streaks which remind you of the striped maple. Back of the *Euonymus* is a fine honey locust with characteristic black bark and prominent spines. These spines are murderous-looking affairs and seem to sprout out all over the tree. On its trunk they are very large and generally they are three-thorned, but often carry many more than this number. This characteristic of three-thorns has given the tree its botanical name *triacanthos,* from *tria* (three) *akantha* (thorn). There is a spineless

variety of the honey-locust, known as *var. inermis,* and the Park has one of this kind not far from the Sixteenth Street entrance. Back of the honey-locust there are some beautiful purple beeches. Note the handsome silver-gray of their barks.

If we come back to the Walk again and continue westwards, beyond the cranberry bush is huckleberry, then Japan quince, then another copper beech standing close by the Walk, on your left. Back of this tree are two common locusts standing close together and, a little further on, two more, almost in a straight line with each other. Passing an open stretch of grassy hillside here, we come, near Terrace Bridge, to fine clumps of arrowwood which you will know at once by their regularly notched leaves. The stems of the *Viburnum dentatum,* the Indians used for arrows, hence its name. Up the hill a little, just beyond the arrowwood is a blue willow. It is really a variety of the white willow with leaves of a very bluish cast on their undersides. By the Walk, beyond the arrowwood, is bay or laurel-leaved willow, which you can distinguish by its dark, glossy green laurel-like leaves noticeably marked by a whitish or yellowish midrib and veins.

Let us come back now to the locust near the spot where we turned off to go up the hill a little. Opposite to it, is a bush of ninebark *Physocarpus* (or *Spiræa opulifolia*). It gets its common name from its ragged, tattered stems and branches. To look at them you might think that they could be peeled more than nine times. The shreds of bark flutter all over them.

The leaves of this shrub are noticeably three-lobed and generally heart-shaped. It bursts into profuse bloom in June, with white flowers in umbel-like corymbs. These soon develop into fruit pods which are quite as conspicuous as its flowers. The pods turn a rusty red or crimson purple. Beyond the ninebark is a Reeve's spiræa, beautiful also in June when it is laden with close clustered heads of pure white flowers. To the right of the Reeve's spiræa, close by the water, rise a couple of splendid white or silver poplars. They are beauties, with their conspicuous barks of a pale greenish silvery gray on the upper branches which in winter throws them out sharply to the eye from the massed tones of adjacent trees. Every breeze showers their leaves with silver or snow. Not many feet further on you meet the European or tree alder (*Alnus glutinosa*). If you can see the little black "cones" on its branches, you will know it at once. But its leaf is characteristic enough to distinguish it; being roundish wedge-shaped, gently cut in at the top and serrated beautifully in wavy cuttings.

Beyond the alder is Reeve's spiræa again and back of this is black haw. Then comes another Reeve's spiræa and back of it, a shadbush. The shadbush you have learned to know by its bark, so beautifully marked. Then we meet common locust again, by the Walk, and beyond the locust, dogwood. An open stretch of grass follows and we stop at a point not far from the Terrace Bridge to look at two lovely willows drooping over the stream close to the water's edge. They are very beautiful and very different.

The one this side is the royal white willow, (*Salix alba, var. regalis*) and you can see in its leaves a close relation to the *vitellina.* But its leaves are much softer and of much finer finish than those of the *vitellina.* Stand back a little and catch the effect of the beautiful silvery-gray cast to the foliage of the *regalis.* The willow beyond it, nearer the Bridge, is purple willow, (*Salix purpurea*), and quite as lovely in its way. How beautifully are the two contrasted by their foliage. The leaves of the purple willow are lanceolate and set on very noticeably olive, or reddish and purplish stems. Its leaves are of a peculiar soft gray-green, with quite a delicate bluish cast. The effect of its foliage is grace and fineness and certainly this sapling has here been well set. A few steps further on we come to Terrace Bridge which spans the stream. This we cross by a little detour up the slope of the hill, and coming down the opposite bank, start at the abutments of the bridge and walk through Lullwater, keeping the stream on our right.

Not far from the Bridge, standing by the water, is yellow willow, and beyond it, a little back on the grass, is an excellent specimen of red oak. It is well up to the type and worth your careful study. Look at its leaves and get them in your eye. Look at its bark, note its greenish-gray tinge. See if you can find acorns on it and, if you do, note their thin saucers or cups. Further on two Camperdown elms lean over the bank, close by the water's edge and beyond them well up on the bank is a fine group

of lilacs. One of these bushes bears white flowers, the others all have purple. Then we come to several Osage oranges and hop-hornbeams. Lock out for the fruit of the hop-hornbeams and see how different it is from that of the hornbeam. Then comes a *Viburnum rugosum,* with rough, wrinkled leaves, and broad heads of white flowers in spring. Its leaves are almost round. You can find it easily for it is not far from a goodly silver maple which stands up quite conspicuously near here. An English hawthorn meets you beyond the silver maple and then a Norway spruce. Quite a little stretch further on you come to another European or tree alder and down by the waterside, further along, a well grown bay or laurel-leaved willow. How it flashes and plays with the sunshine. Near the waterside a little beyond is a graceful striped maple, grown to good size. Note the fine markings of its bark and if you wish to see a graceful sight, come to this tree in May, when its flowers hang in delicate greenish racemes from under its tender and beautifully wrought leaves. You cannot mistake the tree. Its striped bark is distinctive as are also its strongly three-lobed leaves, with the lobes ending in long, fine points. Several beautiful hemlocks float their fine sprays to the breezes here, playing with the lights and shadows of the sunshine. By the streamside you will find a European hazel, very beautiful when the alders are clouding the bare trees with soft crimsons. The bloom of this hazel is worth seeing. It hangs all over it a golden vail, made by the flower-

ing staminate catkins. Beside the hazel is yellow or golden willow.

A good specimen of the English elm stands near the Walk further on and near the center of the bankshore of a cove, a red-mulberry rustles its odd-shaped leaves.

Now we have come to a point where the Walk splits into two forks, the left crossing Nethermead, the right keeping on toward the Boat House. On the Walk we have just been over, we passed, on the left, coming from Terrace Bridge, purple willow, Weir's cut-leaved silver maple (easily known by its very finely cut-leaves), a clump of Austrian pines up on the hillside near Nethermead Circuit Drive: then a long sweep and a bush of common elder about opposite the tree alder; European hornbeam, opposite laurel-leaved willow; box; hemlocks; European hornbeam again, just before you come to the English elm. About opposite the little cove where the red mulberry keeps guard, you find on the left of the Walk, Mugho pine with its dwarf form clutching the bank; Austrian pine again and then two more Mugho pines. Just beyond the Mugho pines are two Cephalonian silver firs which do not seem to be doing nearly so well as their sturdy clansman back of the Arbor and up the slope of Breeze Hill across the stream. That Cephalonian silver fir is a beautiful specimen and is one of the handsomest of its kind in the Park. You can know the Cephalonian by its stiff, sharp, pointed needles, which are dark-green above, white beneath, and have their petioles dilated

lengthwise at the point where they join the branch. The general form of the tree is broadly conical.

Let us leave the Walk here, and follow the edge of the stream to Lullwood Bridge. On the little peninsula about opposite the fork of the Walk, we find two very handsome golden or yellow willows (*Salix alba, var. vitellina*) and about midway between them, a graceful American elm. At the easterly bight of the peninsula's neck, there are, hemlock, two American larches (distinguished from the European by their smaller leaves and cones) and a noble old weeping European silver linden that has kept close friendship many a year with its bankside companion, a rugged old golden willow. These two trees beautifully contrast each other. Back on the grassy swells of the meadow a stately silver maple has set foot and flings its boughs out in a most sheltering way, making a lovely spot for idle moments and drifting reveries. Sit beneath it, some golden spring morning and listen to the silken rustle of its leaves, while the grass plays in silver all about you. Down below it, overhanging the stream, an English maple stands poised as if about to step into the water and just beyond it three European larches whisper together as they softly sway their beautifully pendulous branches, thickset with the jet of their large cones. A little sweep around another gentle bay of the stream brings us to a majestic red oak. It has a large girth and lifts itself up on a stalwart, sweeping trunk that is majesty itself. High up it holds its towering head and in autumn it is a glory when the frost with the

magic of his breath changes its glossy green to brilliant crimson. Beyond the red oak clustered close together by the waterside are a bunch of American chestnuts.

Now we have come to Lullwood Bridge and crossing it we find several things to look at on the peninsula beyond. Following this around, we find a clump of the dwarf Japan catalpa, easily known by its angular leaves. Beyond is another dwarf clump, but of a very different kind. This is the dwarf horse-chestnut, *Pavia macrostachya,* called so from its long, upright racemes of white flowers, which are so conspicuous in early July. Note its beautiful, smooth, palmate leaves. On the point, are fringe trees in a cluster and European flowering ashes, and on the next point of the peninsula, two golden or yellow willows side by side and about opposite them, dropping the beautiful green cascade of its leaves into the stream, a graceful weeping willow. The shore makes a bay in here and at its narrowest point with the Walk, about midway between water and Walk, almost in line with each other are ninebark, sweet pepper bush, and European or tree alder. A fine, old silver maple whispering to itself, stands sentinel at the end of the inlet here, and another one, close by the Walk, overhangs the groups of syringa, which we met as we started on this ramble.

SECTIONAL DIAGRAM
No 11
MUSIC STAND
TO
LONG MEADOW
W
S
N
E
QUAKER
CEMETERY
LONG MEADOW
NETHERMEAD
NETHERMEAD CIRCUIT DRIVE
BRIDLE PATH
WALK
Lamp-post
Swan Boat Lake
Esdale Bridge
Shelter
Steps
Farm House
Music Stand
Boat House
Lily Pond
Terrace
DRIVE

Explanations, Sectional Diagram No. 11

	Common Name	Botanical Name
1.	Black haw.	*Viburnum prunifolium.*
2.	Norway spruce.	*Picea excelsa.*
3.	Panicled dogwood.	*Cornus paniculata.*
4.	Common sweet pepper bush.	*Clethra alnifolia.*
5.	Scarlet oak.	*Quercus coccinea.*
6.	Mockernut hickory.	*Carya tomentosa.*
7.	Ramanas rose.	*Rosa rugosa.*
8.	Missouri currant.	*Ribes aureum.*
9.	White oak.	*Quercus alba.*
10.	Black oak.	*Quercus coccinea, var. tinctoria.*
11.	American chestnut.	*Castanea sativa, var. Americana.*
12.	Flowering dogwood.	*Cornus florida.*
13.	Red maple.	*Acer rubrum.*
14.	Osage orange.	*Maclura aurantiaca.*
15.	Fringe tree.	*Chionanthus Virginica.*
16.	Carolina allspice, or sweet scented strawberry shrub.	*Calycanthus floridus.*
17.	American strawberry bush.	*Euonymus Amenicanus.*
18.	Californian privet.	*Ligustrum ovalifolium.*
19.	American hornbeam.	*Carpinus Caroliniana.*
20.	Common privet.	*Ligustrum vulgare.*
21.	Fragrant honeysuckle.	*Lonicera fragrantissima.*
22.	Carolina allspice. (Glaucous leaved.)	*Calycanthus glaucus.*
23.	Himalayan spruce.	*Picea Morinda.*
24.	Hemlock.	*Tsuga Canadensis.*
25.	Black oak.	*Quercus coccinea, var. tinctoria.*
26.	American white or gray birch.	*Betula populifolia.*

Common Name	Botanical Name
27. American or white elm.	*Ulmus Americana.*
28. American holly.	*Ilex opaca.*
29. Lombardy poplar.	*Populus dilatata.*
30. Weeping Japan pagoda tree.	*Sophora Japonica, var. pendula.*
31. Althæa or Rose of Sharon.	*Hibiscus Syriacus.*
32. Scarlet fruited thorn.	*Cratægus coccinea.*
33. Black alder or common winterberry.	*Ilex verticillata.*
34. Silver bell or snowdrop tree.	*Halesia tetraptera.*
35. Yellow-wood.	*Cladrastis tinctoria.*
36. Variety *Neapolitana* of the cockspur thorn.	*Cratægus crus-galli, var. Neapolitana.*
37. Purple magnolia.	*Magnolia purpurea.*
38. Soulange's magnolia.	*Magnolia Soulangeana.*
39. Cucumber tree.	*Magnolia acuminata.*
40. Slender Deutzia.	*Deutzia gracilis.*
41. Hall's Japan honeysuckle.	*Lonicera Japonica* (or *Halliana*).
42. Ash-leaved maple or box elder.	*Negundo aceroides.*
43. European hazel.	*Corylus avellana.*
44. Sycamore maple.	*Acer pseudoplatanus.*
45. Sweet gum or bilsted.	*Liquidambar styraciflua.*
46. White pine.	*Pinus strobus.*
47. Silver maple.	*Acer dasycarpum.*
48. European linden.	*Tilia Europæa.*
49. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
50. Colchicum-leaved maple.	*Acer Lætum.*
51. Tulip tree.	*Liriodendron tulipifera.*
52. Nordmann's silver fir.	*Abies Nordmanniana.*
53. Mt. Atlas or African cedar.	*Cedrus Atlantica.*
54. American beech.	*Fagus ferruginea.*
55. Sour gum, tupelo or pepperidge.	*Nyssa sylvatica.*
56. Blunt-leaved Japan arbor vitæ.	*Chamæcyparis* (or *Retinospora*) *obtusa.*
57. Red-flowering horse-chestnut.	*Æsculus hippocastanum, var. rubicunda.*

Common Name	Botanical Name
58. Red osier.	*Cornus stolonifera.*
59. Bush cranberry.	*Viburnum opulis.*
60. Scotch elm.	*Ulmus montana.*
61. Caucasian walnut.	*Pterocarya fraxinifolia.*
62. European or English yew.	*Taxus baccata.*
63. Polish Juniper.	*Juniperus communis, var. Cracovia.*
64. Bush Deutzia. (Variety Pride of Rochester.)	*Deutzia crenata, var. Pride of Rochester.*
65. Ginseng.	*Aralia quinquefolia.*
66. Japan lemon.	*Citrus trifoliata.*
67. Variegated English yew.	*Taxus baccata, var. elegantissima.*
68. Rhododendron. (Rosy lilac colored flowers.	*Rhododendron, var. everestianum.*
69. Thread-like Oriental arbor vitæ.	*Thuya Orientalis, var. filiformis.*
70. Golden English yew.	*Taxus baccata, var. aurea.*
71. Camperdown elm.	*Ulmus montana, var. Camperdownii pendula.*
72. Pipe vine or Dutchman's pipe.	*Aristolochia sipho.*
73. Kœlreuteria.	*Kœlreuteria paniculata.*
74. Red oak.	*Quercus rubra.*
75. White beam tree.	*Sorbus* (or *Pyrus*) *aria.*
76. Sassafras.	*Sassafras officinale.*
77. European hornbeam.	*Carpinus betulus.*
78. Pin oak.	*Quercus palustris.*
79. Oriental plane tree.	*Platanus Orientalis.*
80. Black cherry.	*Prunus serotina.*
81. Oleaster.	*Elæagnus angustifolia.*
82. Van Houtte's spiræa.	*Spiræa Van Houttei.*
83. Weeping golden bell or Forsythia.	*Forsythia suspensa.*
84. Japan quince.	*Cydonia Japonica.*
85. Honey locust.	*Gleditschia triacanthos.*
86. Hop hornbeam.	*Ostrya Virginica.*
87. Cherry birch.	*Betula lenta.*

XI.

MUSIC STAND TO LONG MEADOW.

When you take this ramble, may you have such a day as I had, when I started to go over its ground one Saturday, in early summer.

The golden sunshine of the afternoon came slanting through the trees and the music from the Stand swelled and lulled and swelled until it seemed to move with the play of the breeze, harmony for harmony, melody for melody, in a sympathy of rhythm. When the music rushed and thrilled with some exalted ecstacy of harmony, the breeze seemed to rush with it. Rising and swelling in sudden gusts, it came sweeping through the green leaved canopies, shaking them into flying silver, sending through their masses, quick, quivering radiances of light which twinkled like falling rain. At every gust, wave after wave of dancing light played through the illumined green. When these gusts came the shimmering beat of light over the glorified leaves, was music to the eye as much as the sonorous and swelling cadences of the orchestra thrilled music to the ear. Through the pauses of the music, sounded ever, like an echo of waters falling in the heart of the woods, the rustling of the leaves overhead, sounds full of cool suggestions, contentment and refreshment of the soul.

As I stood and watched the beat of light, playing in sweeps of soundless harmonies through the wind-stirred leaves, the fountain blew aloft to the tremble of the music, its upward smoke. The breeze caught it and drifted it gently over the pool, in slowly falling folds of fleecy mists, which seemed to cling lingeringly in the air. As they drifted, they drew the imagination with them and spirits of the air seemed ever draping this fair fountain with a flowing vail; seemed ever changing the fleecy folds, drawing and drawing in endless garniture.

As the slowly drifting, fleecy mists wafted with the breeze, the sunlight struck through their lace, and in the twinkling of an eye, changed them to falling showers of gold; glorified beyond words. Hallowed as by a silent benediction, they sifted slowly away, melting through the trees and fading from sight in wisps and wreaths of drifting gold.

But let us see what we have about us here. Beginning on the northerly side of the Music Stand, all along the waterside, you will find good sized bushes of the panicled dogwood. You will have no difficulty in finding it, if you look for a bush about five feet high, considerably branched and with a smooth ash colored bark. Its dogwood leaves are long oval and taper-pointed, whitish on the undersides and acute or rounded at the bases. But try to see one of these shrubs in the early days of June, when it is putting forth the flower heads which have given it its name *paniculata*. These are white, in distinct, upright panicles. The panicles have a high convex curve of

outline, quite different from the flat top of the alternate leaved dogwood. Indeed, the flower clusters of the *paniculata* are quite cone-shaped. You will know them at once by this mark, when you see them in flower. The flowers develop into white rounded berries about the size of peas on stalks of pale scarlet. These are ripe in late August or early September.

About opposite the north-easterly corner of the Music Stand is a scarlet oak and beside it, sweet pepper bush. Tall and fair and straight, a mockernut hickory stretches up its lofty head nearby and Ramanas rose and Missouri currant flourish in cozy nooks close down by the corner of the low iron ornamental fence which guards the bankside here.

A rustic bridge spans the darkly shadowed water not many feet away, and we will follow the path that leads over it up to the Farm House on the hill and then through the lovely shades of Ambergill out to Long Meadow. Then we will come back to this rustic bridge again and follow the other forking of the Walk in this beautiful section of the Park.

Tall, stately, majestic, with a silent dignity all their own like two Horatii guarding the little bridge, stand two oak trees, both on the right, one at the south end, the other at the north. How like, yet how unlike. The southern is a white oak. Notice its light gray bark. The northern is a black oak. Notice its dark blackish bark whose thick heavy plates are quite different from the thin granite gray scales of the white's.

Just as the Walk crosses the Bridle Path, in the corner at the left, is red maple, and crossing the Bridle

Path, in the corner at the right, is another white oak. Opposite this white oak, on the left of the Walk, is Osage orange with reddish brown bark and spines in its leaf axils. Beside it is another panicled dogwood, and as the path meets the Drive, at the left hand corner is fringe tree and at the right hand, panicled dogwood again.

Before you cross the Drive here, turn to your left and look at some of the things along the side of the Drive as you go west to Nethermead Arches. In that little stretch of things green and lovely, you will find Carolina allspice or sweet scented strawberry with long oval or oblong leaves which are soft and downy on the undersides. Almost beside it stands American strawberry bush, and close by Nethermead Arches, variegated English yew, with dark green leaves in rows along its stems and leaves sharp-pointed.

Let us go back now to the drive crossing by the fringe tree and the panicled dogwood, and cross the Drive. As we take up the thread of the path on the other side, at our right are Carolina allspice and Californian privet and, on our left, American hornbeam, common privet, and fragrant honeysuckle.

The path winds on up the hill, and if you strike off from it for a moment and walk out to the edge of the ridge you will find some extremely interesting evergreens. They are well worth seeing. You will get a near view of them here, but their best showing is seen from the path across the little trickling brook that sings down this pretty ravine. The evergreens of which I speak are specimens of the Himalayan

spruce (*Picea morinda*). They are beautiful trees with long sweeping pendulous branches, giving a cascade effect to their soft light green foliage. If you see the trees from across the brook, they show a noticeably dusty gray tint through their green. This tint is given by the slightly glaucous touching on the undersides of their needles. You will know the trees almost on sight by their long needles, from one to two inches in length. These needles are four sided, of pale green color, strong, stiffish, curving gently round in a fine arc to the top, which is sharply acute.

The path passes some well grown black oaks by the Farm House and, if you take the left fork, turning by the little shelter, it leads you down through the whispering shades of Amergill, beside tinkling waters that have a music all their own. Amergill is a beautiful work of landscape architecture, and as you walk through it, you can easily fancy that you are "way out in the country somewhere." But if you wish to catch something of the enchantment of the place come here some soft moonlight night in summer. The foliage is so dense that the moonbeams only break through here and there in patches of silver. All else is darkness. The song of insects make the air vibrant; the breeze comes and goes through the trees with cool rustlings that are refreshment enough; but over all and through all comes a still small voice, tinkling, tinkling, tinkling time away in drops of silver water. It is the stream stretching its strings like a harp across the face of the rocky glen here, and singing softly to the moonbeams

playing so gently over it. It is the spirit of the place and its serene beauty will haunt you many a day.

As we thread its leaf hung ways, puffs of cool air come up to us from its glens, and if you have come here after a rain, spicy whiffs of things evergreen and of the woods. When you have come about opposite the easterly corner of the shelter that overhangs the path here from a Walk above, look on your left hand for a tree with large dark green leaves of roundish obovate or oblong oval shapes, generally wedge-shaped at the base, either acute or obtuse at the point, and with margins sharply and doubly serrate. The leaves are smooth on the uppersides and very white on the undersides. At a distance you might mistake this tree for a scarlet fruited hawthorn. It is not of that family at all, however, but belongs to the same clan as the mountain ash. It is the white beam tree (*Sorbus* or *Pyrus Aria*). Its flowers are in broad corymbs and these change into globose orange-red berries in close clusters.

If you follow the Walk on until it comes out at Long Meadow, it will show you some noble sweet gums, red oaks, white oaks, black oaks and hornbeams which you have probably learned to pick out at sight now, so we will come back to the rustic bridge by the Music Stand and take up the Walk that runs by Binnen Water, under Nethermead Arches or Three-Arch-Bridge, as it is often called, up the ravine and thence to and around the Swan Boat Lake to Long Meadow again.

Starting then from the rustic bridge, once more,

we pass on the right American gray birch, close by the bridge; red maple, hemlock, American holly, Lombardy poplar with its branches gathered close in to its trunk; weeping Japan pagoda tree just beyond the Lombardy poplar by the pool; then two Rose of Sharon trees, side by side. Of these, the one near the Japan pagoda tree bears white flowers, and the one near the Walk, magenta flowers, usually in July. By the Walk, beyond the Rose of Sharon, stands a scarlet fruited hawthorn. Beyond the hawthorn, a little stretch, you come to a point where the Walk throws off an arm to the left, sweeping the Nethermead. About opposite its point of branching, on the right of the Walk which you have been traversing, nestled in with the shrubbery, you will find black alder or common winterberry (*Ilex verticillata*). As its name implies, it is of the holly family, but its leaves are anything but holly-like of aspect. They are long egg-shaped or wedge-lanceolate and pointed at both ends. On the undersides their veins are downy. Should you pass this shrub in late June you may see its pretty small white flowers of six petals clustered in the axils of the leaves, on short peduncles or stems. These flowers change into bright scarlet berries which ripen late in autumn.

If you should take the arm of the path just spoken of above, sweeping around the Nethermead, it will lead you past many beautiful things. On its right you pass several handsome magnolias. These are *Magnolia purpurea* and bear deep purple flowers early in spring. On the left, opposite them, are silver bell,

Osage orange, and back of the Osage orange a very handsome and rare variety of the cockspur thorn. This variety, which is *Neapolitana,* has two different kinds of leaves, one kind thin and of a rather triangular form, the other of a thick, roundish character, with a very shining coriaceous upper surface. Some botanical authorities speak of it as *Cratægus crus-galli, var. heterophylla,* referring to its characteristic of growing different leaves. Beyond this variety of the cockspur, still on your left, are scarlet fruited thorn and yellow-wood.

At the point where this side arm from the larger path meets the Nethermead Circuit Drive by a little offshoot of Walk, you will find at easy points of identification, by the sectional diagram, European hazel, sycamore maple, sweet gum easily known by its star-shaped leaves and fringe tree. Step out on the Drive now and follow it for a little space toward Lookout Hill. Along its left hand border are very handsome lindens and some of the best grown Colchicum maples in the Park. These last you can pick out by the peculiarly marked bark of their trunks and by their five to seven lobed leaves. These maples bear their blossoms in erect corymbs. To make their identification sure, the tree next to the west of the lamp-post here is Colchicum maple, then comes sycamore maple (with another just south of it), then another Colchicum maple, then a fine tulip tree a little to the south-west of the Colchicum maple. Near the next lamp-post which you pass on your left going west toward Lookout Hill, are several things of in-

terest. Just before you come to it, off to your left, stands another sycamore maple. See how well it merits its name pseudo-platanus. Near it, closer to the Drive and nearer the lamp-post is a Nordmann's silver fir. A little south-west of the lamp-post is a red maple, with another of its kind just beyond it. The next tree west of the lamp-post, and close by the Drive, is Nordmann's silver fir again. What a rich dark green have its leaves. Notice the silver white on their undersides. Directly opposite the lamp-post, on the other side of the Drive and leaning out over the Bridle Path are two fine specimens of the American beech, with smooth light gray bark and chestnut-like leaves. Going still westward on the Drive, just back to the south-west of the last Nordmann, you come to a red maple and further over to a noble evergreen, of light feathery aspect, and graceful fountain-spray form of branching. It was perfect before it lost its top branches, but it is beautiful still. It is the Mount Atlas variety of the Cedar of Lebanon (*Cedrus Atlantica*). You probably have noticed this tree often in your rambles and perhaps have been told that it is Cedar of Lebanon. It is in a way, Cedar of Lebanon. That is it is a variety of it, known botanically as the Mount Atlas Cedar (*Cedrus Atlantica*). If you compare its leaves with those of the *Cedrus Libani* on the southern slope of Breeze Hill you will see that these have a glaucous tinge over them. In addition they are mostly cylindric, stiff, mucronate or sharp pointed and closely clustered. Those of the *Libani* are long needle form, taper pointed, few in fascicle and are of

a deep green color. Notice too that this Mount Atlas Cedar throws up its branches in perfect vase form which is characteristic of the *Atlantica,* whereas the *Libani* has a distinct horizontal swing to its branches.

Let us now come back to the junction of the Walk by the black alder and continue along its course toward Swan Boat Lake. On the right, about opposite a second offshoot of the Walk to the left, you will find thick clumps of ginseng or *Aralia quinquefolia,* which you recognize at once by its five leaves. Great masses of *Deutzia gracilis* bank both sides of this second offshoot of path which climbs a few steps and runs around in a short arc to meet the Drive. We will not follow it now, but will keep on with the path which runs under the Three-Arched-Bridge.

On your left, about midway between the offshoot of the path and the Bridge, close by the Walk and leaning over it are some trees which you will do well to look at closely. They are Caucasian walnuts and you can know them easily by their long compound leaves made up of from eleven to twenty-odd smooth glossy leaflets. The leaflets have crisped margins. The bark of these trees is curiously streaked or marked with reddish brown lines which make you think of the *Halesia* or silver bell. Don't miss them, and if possible don't fail to look for their strings of fruits which develop from long, drooping racemes of flowers. It is the wing on the fruit which has given the tree its botanical name *Pterocarya.* Close by the Bridge, on your left, is English yew. As you come out from under the Bridge and pass the next offshoot of path

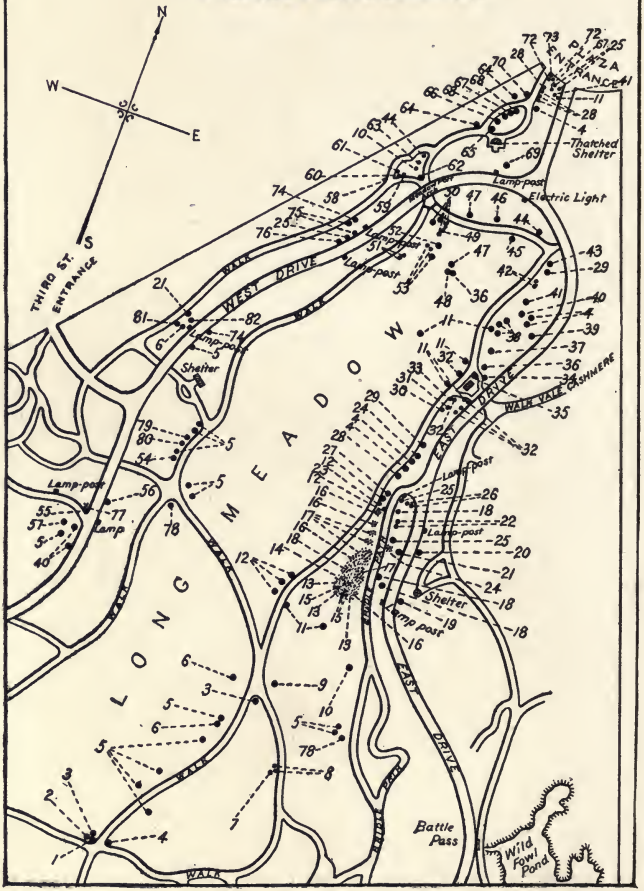
which springs away to the left, you pass variegated English yew, English yew, rhododendron, thread-like Oriental arbor vitæ and golden English yew.

After a delightful sauntering under darksome shades of hornbeam and hemlock and many other things green and woodsy you are led through a rock bordered glen out upon an edge of Long Meadow. The path branches here and we take the left which leads around the Swan Boat Lake.

A pretty little black haw stands close by the Walk and the water, on the right as you go westward. On the left, gathered in a close group about the junction of the Walk are red maple, sweet gum, with American chestnut behind it, and then scarlet oak. Further on a little, tall red oaks rear up their strength and beauty, and as the path comes close again to the water, white oak, black haw, chestnut, and two very fine sweet gums quite close to each other overshadow you. As the path joins another which has climbed up from the Drive, it turns north-westward and bends around Swan Boat Lake, over a beautifully set rustic bridge. On the way around this little sheet of water you pass on the right, or water side, Californian privet, black cherry, oleaster, Van Houtte's spiræa, honey locust, with a fine scarlet oak beside it, and all along the north-western border of the lake, handsome sweet gums, chestnuts, pin oak and the finest groups of pepperidge trees in the Park. These last should be seen, by special appointment, in the days of early autumn. Their glossy leaves take the most beautiful shades of rich maroon or brilliant, cool crimson.

If you follow the water course here it will lead you on to a junction of paths near the spot where we came out from Ambergill and at this junction on the Long Meadow we start on our next ramble.

SECTIONAL DIAGRAM
Nº12
LONG MEADOW
TO
PLAZA ENTRANCE



Explanations, Sectional Diagram No. 12

	Common Name	Botanical Name
1.	European hornbeam.	*Carpinus betulus.*
2.	Californian privet.	*Ligustrum ovalifolium.*
3.	English elm.	*Ulmus campestris.*
4.	American hornbeam.	*Carpinus Caroliniana.*
5.	American chestnut.	*Castanea sativa, var. Americana.*
6.	White oak.	*Quercus alba.*
7.	Sassafras.	*Sassafras officinale.*
8.	Sweet gum or bilsted.	*Liquidambar styraciflua.*
9.	Smooth branched English elm.	*Ulmus campestris, var. lævis.*
10.	Scotch elm.	*Ulmus montana.*
11.	American or white elm.	*Ulmus Americana.*
12.	Red maple.	*Acer rubrum.*
13.	Indian currant or coral berry.	*Symphoricarpos vulgaris.*
14.	Mountain-ash-leaved spiræà.	*Spiræà sorbifolia.*
15.	Tree of Heaven or ailanthus.	*Ailanthus glandulosus.*
16.	Ninebark.	*Physocarpus* (or *Spiræa*) *opulifolia.*
17.	Smooth sumac.	*Rhus glabra.*
18.	Common privet.	*Ligustrum vulgare.*
19.	Spanish chestnut.	*Castanea sativa.*
20.	Yellow birch.	*Betula lutea.*
21.	English oak.	*Quercus robur.*
22.	White pine.	*Pinus strobus.*
23.	Dwarf mountain sumac.	*Rhus copallina.*
24.	Californian privet.	*Ligustrum ovalifolium.*
25.	Austrian pine.	*Pinus Austriaca.*
26.	Paper or canoe birch.	*Betula papyrifera.*
27.	Cherry birch.	*Betula lenta.*
28.	Black haw.	*Viburnum prunifolium.*
29.	European or tree alder.	*Alnus glutinosa.*

Common Name	Botanical Name
30. Choke cherry.	*Prunus Virginiana.*
31. English hawthorn.	*Cratægus oxyacantha.*
32. English elm.	*Ulmus campestris.*
33. Golden bell or Forsythia.	*Forsythia viridissima.*
34. Japan quince.	*Cydonia Japonica.*
35. Hackberry or sugarberry.	*Celtis occidentalis.*
36. Weeping European silver linden.	*Tilia Europæa, var. argentea* (or *alba*) *pendula.*
37. Cut-leaved European elder.	*Sambucus nigra, var. laciniata.*
38. European linden.	*Tilia Europæa.*
39. European silver linden.	*Tilia Europæa, var. argentea* (or *alba*).
40. Silver maple.	*Acer dasycarpum.*
41. Sycamore maple.	*Acer pseudoplatanus.*
42. Judas tree or redbud.	*Cercis Canadensis.*
43. Variety *pyracanthafolia* of the cockspur thorn.	*Cratægus crus-galli, var. pyracanthafolia.*
44. Ginkgo tree.	*Salisburia adiantifolia.*
45. Sour gum, tupelo, or pepperidge.	*Nyssa sylvatica.*
46. Sugar maple.	*Acer saccharinum.*
47. American basswood.	*Tilia Americana.*
48. Small-leaved European linden.	*Tilia Europæa, var. parvifolia.*
49. Imperial Paulownia.	*Paulownia imperialis.*
50. Indian bean or southern catalpa.	*Catalpa bignoniodes.*
51. Indian bean or southern catalpa.	*Catalpa bignoniodes.*
52. Cucumber tree.	*Magnolia acuminata.*
53. Soulange's magnolia.	*Magnolia Soulangeana.*
54. Sweet viburnum or sheep berry.	*Viburnum lentago.*
55. Pin oak.	*Quercus palustris.*
56. Chestnut oak.	*Quercus prinus.*
57. Heart-leaved alder.	*Alnus cordifolia.*
58. Large-racemed dwarf horse-chestnut.	*Pavia macrostachyia.*
59. Sessile-leaved Weigela.	*Diervilla sessilifolia.*
60. Swiss stone pine.	*Pinus Cembra.*
61. Five leaved akebia.	*Akebia quinata.*

Common Name	Botanical Name
62. Evergreen hawthorn.	*Cratægus pyracanthafolia.*
63. European or English yew.	*Taxus baccata.*
64. Hop hornbeam.	*Ostrya Virginica.*
65. Weigela.	*Diervilla amabilis.*
66. English or field maple.	*Acer campestre.*
67. Kœlreuteria.	*Kœlreuteria paniculata.*
68. Yellow-wood.	*Cladrastis tinctoria.*
69. Fern-leaved beech.	*Fagus sylvatica, var. heterophylla.*
70. Flowering dogwood.	*Cornus florida.*
71. Norway maple.	*Acer platanoides.*
72. Lawson's erect cypress.	*Chamæcyparis Lawsoniana, var. erecta.*
73. Obtuse-leaved Japan arbor vitæ.	*Chamæcyparis* (or *Retinospora*) *obtusa var. nana.*
74. Turkey oak.	*Quercus cerris.*
75. Purple-leaved English elm.	*Ulmus campestris, var. stricta purpurea.*
76. Curled-leaved English elm.	*Ulmus campestris, var. cuculata.*
77. Japan Judas tree.	*Cercis Japonica.*
78. Pin oak.	*Quercus palustris.*
79. Flowering dogwood.	*Cornus florida.*
80. Common sweet pepper bush.	*Clethra alnifolia.*
81. Red oak.	*Quercus rubra.*
82. Bur or mossy-cup oak.	*Quercus macrocarpa.*

XII.

LONG MEADOW TO PLAZA ENTRANCE.

In this ramble we start at the fork of the Walk as you come out from Ambergill, and follow the branch that runs along the easterly side of Long Meadow. The trees you pass are well known to you now, if they have not been before, for you have met their kinsmen many times on these rambles. On the right, American hornbeam, American chestnut, and English elm; on the left, European hornbeam, Californian privet, English elm, American chestnut, white oak, with another chestnut quite near it and you have come to another forking of the Walk. For the present we take the right and follow the easterly side of Long Meadow to Meadow Port Arch. We will then come back and follow the left branch from this fork of the Walk along the westerly side of Long Meadow out to Plaza Entrance.

As you go north-easterly, you pass three red maples on the left, and about opposite to them, over on the right, well across the green, you find many things of interest, in the vicinity of the large clumps of shrubbery there. These masses make a fine display just on the border of the Bridle Path between it and the Walk you are following, and when autumn sends over them the stinging breath of her flame, they burst into sudden scarlet and crimson.

As you pass along the Walk, you notice on the right that the shrubberies form themselves here into some four or five distinct groups, and if you study each group by itself you will have little difficulty in identifying the things indicated on the diagram for this section.

Beginning with the first group you meet, you will find flanking its southerly border brave little bushes, which you must not fail to see in autumn. These are Indian currant bushes and in the frosty days hang all through them their bright red berries. The berries have given the bush the name of coral berry. Back of the Indian currant border are several young ailanthus trees, whose leaves you can compare with those of the sumac bushes all about here. About the feet of the ailanthus trees and back of the Indian currant, another clan of soldiery fills up this phalanx of shrubbery. This you will see, by examining its leaves, is the mountain-ash-leaved spiræa, and if you chance to pass near it in midsummer you will see it all puffed over with the white fluff of its bloom. Around on the south-eastern side of this clump of shrubbery, near the Bridle Path, and about opposite a lamp-post, there is a fine gathering of ninebark, which you know at once by its bark-tattered stems and by its roundish, heart-shaped three lobed leaves. If you go up the Bridle Path a little, you pass at your right some excellent specimens of the common privet, and you can see how different is its leaf from that of the Californian privet. Note the bluish-green tinge of the common privet. About opposite the two clumps of common privet you have at the left, banked in the clump of

shrubbery, excellent specimens of the smooth sumac. This sumac has leaves quite similar to those of the staghorn sumac, but if you look at its branches you will see that they are very smooth and have none of that woolly, fuzzy pubescence which is the characteristic mark of the staghorn. Indeed, it is this similarity of aspect of its branches (when stripped of leaves) to the young horns of a stag that has given it its name.

Follow this first clump right around its margin, and you pass, beyond the smooth sumac, smooth sumac again, then ninebark again, then common privet then back to Indian currant.

Now let us continue along the path by Long Meadow. We pass another circular clump of shrubbery on our right. This is smooth sumac and so is the next clump. Then we come to two clumps, mostly ninebark, and another cluster of bushes in the neck of the bank where the Walk and Bridle Path come close together. This is the beautiful *Rhus copallina* or dwarf mountain sumac, which is so handsome in early autumn. You can tell it at once by the wings on its leaf steam, between each pair of leaflets.

If when you were on the Bridle Path a moment ago you had not turned in by the smooth sumac but had kept on, you would have passed, on the right, Californian privet, Austrian pine, two handsome white pines side by side, then common privet, and Austrian pine right back of the lamp-post, where the Bridle Path comes into East Drive. Over to the right of

this Austrian pine are two paper birches standing close together.

Continuing now along the meadow walk, beyond the *copallina* you meet red maple, cherry, birch, black haw, American hornbeam, Californian privet, black haw again, then a little open stretch, and then choke cherry, with English hawthorn a little back and beyond, and Forsythia very near a spur of the Walk, which bends to the right to climb a few steps to the Drive crossing. Close to the Drive, back of the last mentioned trees and shrubs are several English elms all doing well and all easily recognized by their stalwart trunks and oak-like thrust of branches. Following the spur of path here, not across the Drive, but in its semi-circular wandering down a series of steps back to the Walk again, we pass a hackberry right in the fork of its left hand junction and opposite the hackberry, on the right hand bank, Japan quince and European silver linden.

Now we continue along the meadow path again and the right hand bank has some beautiful lindens both European and American, over which you can well spend many hours of botanizing. As you come near Endale Arch (the Arch beneath which one branch of this Walk passes the Drive and leads out to the right hand exit of the Park at the Plaza) look for the pretty hawthorn with leaves which resemble so much those of the evergreen hawthorn (*pyracantha*) that they have won for it the name *pyracanthafolia.* It stands up the bank a little beyond the Judas trees and between a European alder and

Endale Arch. You will know it by its small narrow oblanceolate, dark, leathery, shining leaves. It is a variety of the cockspur thorn, and has a kinsman down in the Pool of Vale Cashmere.

At Endale Arch we turn sharply to our left to take the crosswalk over to the Arch opposite, named long ago by the Park authorities, Meadow Port Arch. It is often familiarly called F Arch, because of its resemblance to that letter. As we turn westward then and follow this arm of the path, you will find an extremely interesting ginkgo tree near Endale Arch on the right of the Walk. It is an especially interesting gingko because it usually fruits abundantly. This is the tree of which we spoke in Chapter IX., and if you wish to see the fruit of the ginkgo come to it early in the fall. If you have a sensitive nose you had better look at the fruit from the Walk.

Follow the path until you come about opposite the lamp-post up on the Drive at your right. Not quite in line with it, but near enough for you to locate it stands a handsome sugar maple a little to the right of the Walk. It is an excellent type of its variety, and its low hung branches make it a good tree on which to see its flowers at close range. This tree flowers very abundantly and in April or May you may find them hanging in long umbel-like clusters, just about the time the tree is clothing itself with leaves. The wings of its fruit do not quite form a right angle. This, by the way, is one of the best means of identifying a maple, by noting the angle of

the wings of its keys. In botanical terms, a key is a winged fruit.

Just before you came to this sugar maple you passed on your left, about midway between the ginkgo tree and the sugar maple, a good specimen of the sour gum or pepperidge or tupelo, as it is often called. I never get tired of singing the praises of these sour gum trees. They are like crusts of bread to the lenses of the eye, when winter has whipped off their leaves and shows them forth in all their gnarled and twisted beauty. What a fire slumbers in their glossy leaves! The sour gum flowers in April or May, in dense clusters, and its fruit, eggshaped, is bluish black, clustered two or three together on long stems from the axils of the leaves. This tree's leaf has its margin entire, but often beyond the middle strongly angulated. The leaf is thick and shining on the upper side, with a rich gloss. You can pick the tree out at once by its trick of growing its leaves in crowded clusters near the ends of the branches. In autumn no tree in the Park puts on such rich, lustrous, brilliant tones of crimson, maroon, and subdued mahogany.

Beyond the sugar maple, as you go westward along this Walk, you pass on the right, about opposite the Thatched Shelter, an American basswood. Have you noticed the distinct yellowish cast in the green of the American basswood? It is especially distinct in late July or August, and is a sure mark of the tree.

Further along on your left, you pass a clump of many interesting things, gathered close together in

this corner of Long Meadow. By the way, what a lovely meadow this is! Either in summer sunshine, when it rolls away in velvet swells, or on gray days when wreathing wraiths of mist half enfold it with slow dragging vails of cloud, or in winter when it lies hushed in driven snow on which the shadows of elms and lindens draw silhouettes of delicate violet.

But to come back again. On the left, we have here some fine specimens of the catalpa, magnolia and a tree which I do not think you have met before if you have followed these rambles. There are kinsmen of it in the Park, but they are in parts away from the walks. The tree is quite common on the streets of the city, and I suppose has been often mistaken for a catalpa. But, though indeed it looks much like one, it is quite different. The catalpa belongs to the *Bignoniaceae* or Bignonia family, and this tree, the *Paulownia imperialis* belongs to the *Scrophulariaceae* or figwort family. They resemble each other in form (slightly) and leaf (quite closely), but in fruit they are extremely different. The *Paulownia* is a very interesting tree in winter because of its conspicuous fruit and bud clusters of next spring's flowers. These stand up very noticeably on the upper branches of the tree, clear and distinct against the sky, a sure sign of the tree's identity. Take a bunch of grapes, pluck off the grapes, turn what you have left point up and you will have, if you hold it off from you a little, a very fair imitation of what these bud clusters look like. On these the tree's flowers bloom in early spring, before the leaves come out, if the winter has

not been severe. A hard winter kills the buds and then they fail to bloom. The flowers are of a beautiful violet color, heavily fragrant and resemble the flowers of the catalpa, long, funnel form, with flaring flanges of lobes. This tree gets its name from Paulownia, daughter of the Czar, Paul I., and it was brought into Russia from Japan. It has been widely introduced in this country and having escaped from cultivation has become really native. The tree, as has been said above, is very catalpa-like, both in its habit of sending out rambling, sprawling branches and in its foliage. Its leaves are, however, more pointed and angular than those of the catalpa. Its bark is also very different, darker and more like that of the ailanthus. It is a tree which is often, in winter, mistaken for both the ailanthus and the catalpa, but its flower-bud sign will set you straight. Often in winter you will see clinging to this flower stalk the fruit husks of the tree, ovate, pointed capsules, about one and a half inches long, densely packed with many flat-winged seeds, and if you find one of the fallen pods on the ground break it open and see the delicate little brown seeds winged with white fluff. Botanically the tree is *Paulownia imperialis* and, as has been said, belongs to the figwort family. You will find a fine *Paulownia* in the center of the group of catalpas here.

A few steps further on brings us to Meadow Port Arch. We will not pass through it now, but will go back to the fork of the Walk down on Long Meadow, where we branched off to the right to follow

the easterly path along the Meadow. Now we will follow the path skirting the westerly side of the Meadow and to do it, we take at the fork here the left hand branch.

You no doubt are already familiar with many of the trees we pass and we will hurry on a little, beneath the overhanging branches of chestnut, hickory, sweet gum and soft maples, to the next fork of the Walk. A very handsome young pin oak stands in the very point of the south-eastern angle made by the junction of the paths. Hunt for its beautiful, small acorn, the tiniest, daintiest nut. It is scarcely half an inch long and its cup is extremely shallow saucer-shaped and is almost sessile.

Continue along the cross-walk here to the Drive, and follow the Drive southward until you come to an arm of it leading off at your right. This arm has its point of junction about opposite a lamp-post, on the left. In the clump of things clustered in the south-west angle of this fork of the Drive, you will find one very peculiar and very interesting tree. It is the heart-leaved alder and has grown to the dignity of a good sized tree. You will have no trouble in finding it, for the telltale alder "cones" hang thickly all through it, black, and very easily seen. But look at its leaves. See how heart-shaped they are. Note their dark shining green. This tree comes from Southern Europe and after it gets a hold on the soil, grows well. It bears its flowers, greenish-brown in March or April before the leaves come out. It stands here in a triangle made up of itself, a chest-

nut, and a silver maple, and of this triangle it fills the western corner.

Let us now come back to the pin oak at the fork of the Walk, where we broke off to cross the Drive. We will now follow its north-westerly branch, which skirts the westerly side of Long Meadow.

Between the fork by the pin oak and the next branching of the path there is a good bush of the sweet viburnum not very far along on your left. You will know it by its very finely serrated leaves. It is also quite close to a chestnut which will serve you as an index to its position.

As you follow the Walk along, beyond the Shelter it bends in toward West Drive. Just as it begins to turn away from West Drive, if you leave the path and step across the grass to the Drive, you will find close by it, a tree that will interest you. It is the Turkey oak, and it is a good one. Have you ever seen the acorns of the Turkey oak? If not you have something to see. For ragged ends of fringe the bur oak acorn does pretty well, but it is not a circumstance to what the acorn of the Turkey oak can do. Hunt around for one. They are worth seeing. They are ovate and have a very bristly fringed hemispherical cup. The leaves of this tree are rich, glossy green, oblong, very deeply and unequally notched into pinnate sinuses, and are on very short stalks. Their lobes are rather angularly cut. To find this tree more readily it is not far from a chestnut which also stands close by the Drive. Almost directly across the Drive from these two trees stands a lamp-post, and to its

right, if you get your back to it and face west, down on the slope, is a bur oak. North-west of the bur oak stands English oak, very close to the Walk. Still keeping your stand by the lamp-post, to your left, up the rise a little is white oak, and west of it, red oak. Lamp-posts are not to be despised. They can be used to light the steps in more ways than one and I hope you have found them sprinkled very generously over the diagrams of this book. Their presence, I thought, would serve to correct judgments of distance or to reassure judgments of correct distancing. Sometimes it happens that a bush is cut out or a tree cut down. Landmarks of this kind often disappear, but lamp-posts are not cut down so frequently.

Let us now come back to the Walk again. We pass over quite a little stretch of meadow until we come near two catalpas that have been cut down to mere stumps of trunks. These are on the right of the Walk, and not very far from Meadow Port Arch. If you cut across from them, to the left, over the grass and across the Drive, you will find another lamp-post. The first tree to the south of this lamp-post, on the Drive, is a purple leaved English elm, the next is an Austrian pine, the next is a curled-leaved English elm and is located directly opposite another lamp-post on the other side of the Drive, so you can scarcely help finding these trees. Back of lamp-post number one, in this enlightened gathering of things botanical and mineral, you will find another Turkey oak, close by the Walk and in fine condition.

If you go back now to the Walk on the Meadow again and go through Meadow Port Arch you will come out upon a little island of shrubbery set down very cozily just in front of the Arch. This island has somewhat the form of a spherical triangle with the longer side (the westerly) indented by a curving bay. We begin with the branch that slips off at our left as we come from the Arch, and follow around this island of shrubbery. In the easterly angle of the island, just as you come from the Arch, is evergreen thorn (*Cratægus pyracantha*) with dark shining foliage. This shrub bears light pink flowers and orange-scarlet berries in the winter. A Swiss stone pine fills the south-westerly angle of the island and just this side of it, that is east of it, is a good bush of the sessile-leaved *Weigela*. Diagonally across from the Swiss stone pine, on the opposite border of the path, parallel with the boundary line of the Park, is an excellent clump of the dwarf long-racemed buckeye. This shrub is very handsome in July, when it throws up tall, tapering racemes of white bloom, which stand up over its horizontally spreading leaves in a very conspicuous manner. The leaves are themselves very handsome, of thin, fine texture, palmately compound. They make a fine showing for the shrub, even when it is not in bloom. You will find this bush directly i . front of you as you come from the left branch path beside the island of shrubbery. Following the circumference of this island, northward, you meet in its northerly angle a well grown ginkgo tree with straight

shaft and branches thrown out at angles of about forty-five degrees; with beautiful fan-like leaves that make you think of the maiden-hair fern.

From the ginkgo tree, following the border of the "island" back now toward the Arch, stands English yew and then Scotch elm. The elm is higher up on the bank.

This completes our reconnaissance of the island and we leave it by the path which, branching from the right as you go from Meadow Port Arch, climbs up a little rise beyond the ginkgo and finally comes out at the Plaza. At Thatched Shelter it forks again to wreathe, in its leisurely rambling, another "island" and flows together again a little further beyond. We go down the left branch past a well grown hop-hornbeam on the left (just at the break of the fork) and then on the right, as we go on, *Weigela,* English field maple, yellow-wood, *Kœlreuteria* and yellow-wood again. On the left, just as you come out at the confluence of the two branches of the path, are hop-hornbeam again and flowering dogwood.

As the path flows together again and we follow it, we pass on the right, one after another, standing almost side by side four black haws. Directly across to the right of the third one, on the border of the Drive, you will find American elm and near the Exit, beyond the elm, by the Drive, is Austrian pine with another beside it, to the left. In between the Austrian pines and a little back of the American elm is sycamore maple. This you know readily by its

buttonwood-like leaves. Another *Kœlreuteria* has taken up position to the side of the sycamore maple. The American elm, the sycamore maple, and the *Kœlreuteria* are almost in a line with each other, the line cutting the Walk at an angle of about forty-five degrees.

As you follow the Walk out from the Park, in the corner at your right, are clustered many beautiful things. Indeed, too many to mark them on any diagram, but perhaps you may pick some of them out by a brief text description and by noting their locality which can only be indicated. The small evergreen in the corner, nearest the Exit, with the pretty curved fan-shaped sprays of close, blunt leaves is *Retinospora obtusa, var. nana;* the shrub just this side of it, by the path, is Lawson's erect cypress and you can tell it by its leafsprays which seem to grow in vertical planes like series of partitions. There is another evergreen of the same kind just beyond it, over toward the stone wall that flanks the Park on the north.

With the identification of these evergreens, this little book of Park rambles draws to a close. It is intended as a beginner's book, and if it has awakened in the hands of its users a desire to know more about the beautiful things of our Park, gathered there with so much labor, with so much judgment, and at such expense, it will have more than succeeded in its purpose. Go out to our exquisite Park. Study its flowers, its shrubs, its trees, with a pur-

pose, and your reward will be great. Every ramble will have something new to tell you. Though you walk it for years, every leafy way shall unfold to you some fresh secret, and the old story of the seasons will be always a new one for you.

THE END.

INDEX OF COMMON NAMES.

[Numerals in full face type refer to the explanation tables and the numerals not in full face type to the tree or shrub number on each table.]

Abele tree or white poplar, **10,** 71.
Adam's needle, **3,** 48.
African Cedar. *See Mount Atlas Cedar.*
Ailanthus, **9,** 56; **12,** 15.
Akebia, Five-leaved, **1,** 71; **10,** 35; **12,** 61.
Alcock's spruce, **6,** 57.
Alder, Black, or common winterberry, **11,** 33.
— European, **1,** 113; **4,** 64; **6,** 7; **7,** 58; **8,** 29; **9,** 13; **10,** 93; **12,** 29.
— European, Imperial cut-leaved, **2,** 46.
— Heart-leaved, **12,** 57.
— Hoary, **7,** 61.
— Smooth, **9,** 99.
— Speckled, **7,** 61.
— Tree. *See Alder, European.*
Allspice, Carolina, **11,** 16.
— Carolina, Glaucous-leaved, **11,** 22.
Alternate-leaved dogwood, **9,** 101.
Althæa or Rose of Sharon, **11,** 31.
Amelanchier. *See Shadbush.*
American Arbor Vitæ, Pyramidal variety, **5,** 24.
— Basswood, **1,** 22; **3,** 34; **4,** 62; **6,** 5, 48; **7,** 20, 39; **9,** 78; **12,** 47.
— Beech, **1,** 115; **2,** 54; **11,** 54.
— Bladder nut, **10,** 34.
— Buttonwood, **1,** 97.
— Chestnut, **2,** 15; **4,** 11; **10,** 108; **11,** 11; **12,** 5.
— Elm; **3,** 10; **4,** 49; **6,** 9; **7,** 17, 26; **8,** 33; **9,** 74; **10,** 101; **11,** 27; **12,** 11.
— Hazel, **1,** 54.
— Holly, **1,** 121; **10,** 54; **11,** 28.
— Hornbeam, **2,** 5; **4,** 20; **5,** 61; **6,** 24, 25, 34, 39, 46; **7,** 40; **10,** 64; **11,** 19; **12,** 4.
— Larch, **10,** 105.
— Strawberry Bush, **11,** 17.
— White ash, **1,** 92; **3,** 73; **4,** 35; **5,** 20; **6,** 45; **7,** 25; **8,** 3; **10,** 62.
— White elm, **3,** 10; **4,** 49; **6,** 9; **7,** 17, 26; **8,** 33; **9,** 74; **10,** 101.
— White or gray birch, **4,** 55; **6,** 21; **7,** 59; **11,** 26.
— Willow, New; **9,** 41.
Amorpha fructicosa, **5,** 46.
Andromeda Axillaris, **1,** 77; **10,** 56.
— Catesby's, **6,** 61.
Angelica tree, **1,** 78; 85; **9,** 18.
Aralia, Spiny, **1,** 78, 85; **9,** 18.
Arbor Vitæ, American, Pyramidal variety, **5,** 24.
— Chinese, **3,** 23.
— Japan, Blunt-leaved, **11,** 56.
— Japan, Golden pea-fruiting; **3,** 18.

— Japan, Golden plume-leaved; **1,** 4.
— Japan, Obtuse-leaved; **12,** 73.
— Japan, Plume-leaved; **1,** 5; **3,** 39; **6,** 62; **10,** 33.
— Japan, Variety *squarrosa,* **1,** 6; **3,** 70.
— Oriental, Thread-like; **11,** 69.
Arrowwood, **1,** 55; **5,** 40; **8,** 44; **9,** 48; **10,** 79.
— Maple-leaved or dockmackie, **2,** 44.
Ash, American white, **1,** 92; **3,** 73; **4,** 35; **5,** 20; **6,** 45; **7,** 25; **8,** 3; **10,** 62.
— Aucuba-leaved, **8,** 19; **9,** 58.
— European, **3,** 36; **9,** 10.
— European, Crisp-leaved; **3,** 74.
— European flowering, **1,** 23; **3,** 7, 67; **5,** 8; **6,** 16; **8,** 18; **9,** 25; **10,** 112.
— European flowering, Willow-leaved; **9,** 3.
— European, Single-leaved, **1,** 110; **5,** 1; **8,** 5, 26.
— European, Weeping, **1,** 104.
— European, Willow-leaved; **1,** 108.
— Northern prickly, **8,** 31.
— Willow-leaved, European flowering, **9,** 3.
Ashberry or Japan mahonia, **10,** 17.
Ash-leaved maple or box elder, **1,** 93; **2,** 4; **4,** 6; **5,** 55; **6,** 27; **8,** 9; **9,** 26; **11,** 42.
Aucuba, Japan, **3,** 41.
Aucuba-leaved ash, **8,** 19; **9,** 58.
Austrian pine, **1,** 2; **2,** 52; **3,** 6; **4,** 9; **5,** 42; **6,** 14; **9,** 43; **10,** 30; **12,** 25.
Azalea, Garden, **3,** 72.
— Ghent, **3,** 38.
— Lovely, **1,** 73; **3,** 42.
Babylonian Willow, **1,** 64; **10,** 109.
— Willow, Golden-barked, **9,** 50.
Bald Cypress **7,** 52; **8,** 15; **10,** 31.
— Cypress, Weeping, **2,** 32; **6,** 44; **9,** 55.
Barberry, Common, **4,** 43; **7,** 34; **8,** 39.
— Japan. *See Barberry, Thunberg's,*
— Purple, **1,** 68; **4,** 42; **7,** 41.
— Thunberg's, **4,** 13.
Basswood, American, **1,** 22; **3,** 34; **4,** 62; **6,** 5, 48; **7,** 20, 39; **9,** 78; **12,** 47.
Bay or laurel-leaved willow, **7,** 28; **9,** 69; **10,** 80; 94.
Bay, Sweet; or Swamp magnolia; **1,** 106; **10,** 60.
Bayberry, **9,** 47.
Beam tree, White; **11,** 75.
Bean trefoil tree. *See Laburnum.*
Beech, American, **1,** 115; **2,** 54; **11,** 54.
— Blue. *See Hornbeam, American.*
— Copper, **1,** 19; **3,** 52; **10,** 44.
— European, **1,** 102; **2,** 66; **4,** 58; **5,** 2.
— European purple, **9,** 42; **10,** 67.
— European weeping, **1,** 16; 8, 7; **9,** 49.
— Fern-leaved, 1, 70; **10,** 103; **12,** 69.

— Purple European, **9**, 42; **10**, 67.
— Water. *See Hornbeam, American.*
— Weeping European, **1**, 16; **8**, 7; **9**, 49.
Bhotan pine, **1**, 37; **2**, 25, 43; **4**, 7; **10**, 5.
Big shellbark or kingnut hickory, **10**, 114.
Bilsted. *See Sweet gum.*
Birch, American white or gray, **4**, 55; **6**, 21; **7**, 59; **11**, 26.
— Canoe. *See Birch, paper.*
— Cherry, **2**, 53; **4**, 22; **5**, 62; **6**, 37, 42; **7**, 47; **11**, 87; **12**, 27.
— European white, **9**, 1, 76.
— European white, Cut-leaved or weeping, **9**, 23.
— Gray, or American white birch, **4**, 55; **6**, 21; **7**, 59; **11**, 26.
— Paper or canoe, **1**, 12; **4**, 26; **5**, 18; **7**, 43; **12**, 26.
— Red, **1**, 103.
— River, **1**, 103.
— White, American or gray, **4**, 55; **6**, 21; **7**, 59; **11**, 26.
— White European, **9**, 1 76.
— Yellow, **6**, 2; **12**, 20.
Bird cherry, European; **6**, 32; **8**, 25.
Black Alder or common winterberry, **11**, 33.
— Birch. *See Cherry birch.*
— Cherry, **4**, 59; **5**, 51; **6**, 42; **9**, 64; **10**, 50; **11**, 80.
— Gum. *See Sour gum.*
— Haw, **2**, 38; **5**, 26; **6**, 43; **8**, 10; **9**, 85; **10**, 73; **11**, 1; **12**, 28.
— Hawthorn, **5**, 5; **9**, 12, 21.
— Mulberry, **2**, 48.
— Oak, **2**, 56; **4**, 44; **9**, 52; **11**, 10; **11**, 25.
— Thorn. *See Black haw-thorn.*
— Walnut, **1**, 91; **3**, 8; **4**, 60.
Bladder nut, American, **10**, 34.
— Senna, **9**, 103.
Blue willow, **3**, 57; **10**, 81.
Blunt-leaved Japan arbor vitæ, **11**, 56.
Bocconia. *See Tree celandine.*
Box or boxwood, **10**, 4, 25, 96.
Box elder or ash-leaved maple, **1**, 93; **2**, 4; **4**, 6; **5**, 55; **6**, 27; **8**, 9; **9**, 26; **11**, 42.
Bridal-wreath spiræa, **1**, 44; **5**, 35; **7**, 13.
Bristly locust, **5**, 44.
Broad-leaved European linden, **4**, 46; **5**, 32, 63, 64; **7**, 3.
Buckeye, Sweet, **10**, 58.
— Yellow flowered, **2**, 37.
Buckthorn, Common, **9**, 73.
Bumald's spiræa, **1**, 8.
Bunge's catalpa, **1**, 62; **3**, 78; **9**, 81; **10**, 111.
Bur oak, **1**, 117; **8**, 47; **9**, 96; **12**, 82.
Bush Cranberry, **1**, 21; **10**, 76; **11**, 59.
— Deutzia, **6**, 38; **8**, 30; **9**, 87; **10**, 2.
— Deutzia, Variety Pride of Rochester, **7**, 60; **8**, 51, **11**, 64.
Buttonbush, **1**, 79; **2**, 36.
Buttonwood, **1**, 97.

Californian privet, **1,** 94; **2,** 1; **4,** 40; **8,** 16; **9,** 44; **11,** 18; **12,** 2, 24.
Camperdown elm, **2,** 41; **3,** 1; **4,** 30; **9,** 40; **10,** 3; **11,** 71.
Canoe birch, **1,** 12; **4,** 26; **5,** 18; **7,** 43; **12,** 26.
Carolina Allspice, **11,** 16.
— Allspice, Glaucous-leaved, **11,** 22.
Catalpa, Dwarf Japan (Bunge's catalpa) **1,** 62; **3,** 78; **9,** 81; **10,** 111.
— Southern or Indian bean tree, **1,** 63; **6,** 11; **8,** 41; **12,** 50.
Catesby's andromeda, **6,** 61.
Caucasian walnut, **11,** 61.
Cedar, African, **11,** 53.
— Deodar, or Indian, **3, 71.**
— Lebanon, **9,** 102.
— Japan, **6,** 54.
— Mount Atlas, **11,** 53.
— Red, **5,** 23.
Celandine, Tree, **10,** 48.
Cephalonian silver fir, **1,** 33; **3,** 17; **10,** 47.
Cherry Birch, **2,** 53; **4,** 22; **5,** 62; **6,** 37, 42; **7,** 47; **11** 87; **12,** 27.
— Bird, European; **6,** 32; **8,** 25.
— Black, **4,** 59; **5,** 51; **6,** 42; **9,** 64; **10,** 50; **11,** 80.
— Choke, **4,** 24; **5,** 52; **12,** 30.
— Cornelian, **1,** 15, 98; **2,** 2; **3,** 9; **8,** 52.
— Wild red, **2,** 26.
Chestnut, American, **2,** 15; **4,** 11; **10,** 108; **11,** 11; **12,** 5.
— Oak, **12,** 56.
— Spanish, **1,** 100; **12,** 19.
China, Maple of Northern, **9,** 63.
Chinese Arbor Vitæ, **3,** 23.
— Cork tree, **6,** 60.
— Lilac, Weeping, **3,** 60.
— Podocarpus, **3,** 31.
— Quince, **5,** 48.
— Wistaria, **7,** 7; **10,** 37.
Choke, cherry, **4,** 24; **5,** 52; **12,** 30.
Cockspur Thorn, Oval-leaved variety, **9,** 86.
— Thorn, Variety *Neapolitana,* **11,** 36.
— Thorn, Variety *pyracanthafolia,* **1,** 72; **12,** 43.
Coffee-tree, Kentucky, **1,** 36; **3,** 26; **5,** 50; **9,** 45.
Colchicum-leaved maple, **3,** 14; **11,** 50.
Colorado blue spruce, **2,** 19; **4,** 8.
Common Barberry, **4,** 43; **7,** 34; **8,** 39.
— Buckthorn, **9,** 73.
— Elder, **1,** 56; **7,** 51; **10,** 15, 46, 92.
— Horsechestnut, **1,** 61.
— Locust, **1,** 32; **4,** 28; **9,** 66; **10,** 66.
— Privet, **11,** 20; **12,** 18.
— Snowball or guelder rose, **1,** 40; **8,** 49.
— Sweet pepper bush, **2,** 11; **10,** 22; **11,** 4; **12,** 80.
— Winterberry or black alder, **11,** 33.
Copper beech, **1,** 19; **3,** 52; **10,** 44.
Coral berry, **12,** 13.
Cork tree, Chinese, **6,** 60.
Cork bark elm, English; **1,** 82; **2,** 51; **3,** 49; **4,** 48; **9,** 2.
Cornelian cherry, **1,** 15, 98; **2,** 2; **3,** 9; **8,** 52.

Corsican pine, **1**, 89.
Cranberry, Bush, **1**, 21; **10**, 76; **11**, 59.
Crisp-leaved European ash, **3**, 74.
Cryptomeria Japonica. *See Japan cedar.*
Cucumber tree, **5**, 37; **7**, 36; **9**, 5; **10**, 63; **11**, 39; **12**, 52.
Cunninghamia, **3**, 27.
Curled-leaved English elm, **12**, 76.
— Willow, **9**, 79.
Currant, Indian, **12**, 13.
— Missouri, **11**, 8.
Cut-leaved European alder, Imperial; **2**, 46.
— European elder, **10**, 53; **12**, 37.
— Silver maple, Weir's, **9**, 107; **10**, 83.
— Weeping European white birch, **9**, 23.
Cypress, Bald, **7**, 52; **8**, 15; **10**, 31.
— Bald, Weeping; **2**, 32; **6**, 44; **9**, 55.
— Ground, Japan. *See Japan arbor vitæ.*
— Lawson's erect, **12**, 72.
Day lily, **3**, 11.
Deodar or Indian cedar, **3**, 71
Deutzia, Bush or Fortune's, 6, 38; **8**, 30; **9**, 87; **10**, 2.
— Bush or Fortune's, Variety Pride of Rochester; **7**, 60; **8**, 51; **11**, 64.
— Slender, **1**, 67; **3**, 30; **10**, 39; **11**, 40.
Devil's walking stick, **1**, 78, 85; **9**, 18.
Dockmackie, **2**, 44.
Dogwood, Alternate-leaved, **9**, 101.
— Flowering, **1**, 69; **3**, 4; **4**, 25; **5**, 30. 59; **7**, 44; **10**, 75; **11**, 12; **12**, 70, 79.
— Panicled, **11**, 3.
— Red flowering, **4**, 29.
Dotted fruited hawthorn, **2**, 3; **2**, 28.
Double red-flowering peach, **3**, 63.
Dutchman's pipe, **11**, 72.
Dwarf Catalpa (Japan), **1**, 62; **3**, 78; **9**, 81; **10**, 111.
— Horsechestnut, Large racemed, **1**, 66; **10**, 110; **12**, 58.
— Mountain sumac, **1**, 46; **9**, 60, 94; **12**, 23.
— White spiræa, Fortune's, **1**, 81.
Eagle's claw maple, **1**, 9.
Elæagnus. *See Oleaster.*
Elder, Common, **1**, 56; **7**, 51; **10**, 15, 46, 92.
— European cut-leaved, **10**, 53; **12**, 37.
Elm, American or white, **3**, 10; **4**, 49; **6**, 9; **7**, 17, 26; **8**, 33; **9**, 74; **10**, 101; **11**, 27; **12**, 11.
— Camperdown, **2**, 41; **3**, 1; **4**, 30; **9**, 40; **10**, 3; **11**, 71.
— English, **2**, 16; **4**, 10; **5**, 49; **7**, 29, 31; **8**, 1; **10**, 36, 99; **12**, 3, 32.
— English cork bark, **1**, 82; **2**, 51; **3**, 49; **4**, 48; **9**, 2.
— English, Curled-leaved, **12**, 76.
— English, Plume-leaved, **6**, 64.
— English, Purple-leaved, **1**, 86; **12**, 75.

— English, Smooth branched, **12**, 9.
— Purple-leaved English, **1**, 86; **12**, 75.
— Scotch, **1**, 11; **2**, 49; **3**, 50; **7**, 46; **8**, 8; **9**, 75; **11**, 60; **12**, 10.
— White, **3**, 10; **4**, 49; **6**, 9; **7**, 17, 26; **8**, 33; **9**, 74, **10**, 101; **11**, 27; **12**, 11.
English Cork bark elm, **1**, 82; **2**, 51; **3**, 49; **4**, 48; **9**, 2.
— Elm, **2**, 16; **4**, 10; **5**, 49; **7**, 29, 31; **8**, 1; **10**, 36, 99; **12**, 3, 32.
— Elm, Curled-leaved, **12**, 76.
— Elm, Plume-leaved, **6**, 64.
— Elm, Purple-leaved, **1**, 86; **12**, 75.
— Elm, Smooth branched; **12**, 9.
— Field maple, **1**, 25; **2**, 59; **4**, 54; **5**, 66; **10**, 23; **12**, 66.
— Hawthorn, **1**, 20; **2**, 14; **4**, 34; **5**, 53; **8**, 43; **9**, 11, 28, 90; **10**, 90; **12**, 31.
— Maple. *See English field maple.*
— Oak, **1**, 65; **9**, 100; **12**, 21.
— Oak, Weeping, **1**, 1.
— Walnut, **1**, 122; **2**, 34.
— Yew, **3**, 16; **10**, 19; **11**, 62; **12**, 63.
— Yew, Golden; **11**, 70.
— Yew, Variegated; **2**, 42; **6**, 63; **11**, 67.
— Yew, Weeping; **3**, 68.
European Alder, **1**, 113; **4**, 64; **6**, 7; **7**, 58; **8**, 29; **9**, 13; **10**, 93; **12**, 29.
— Alder, Imperial cut leaved, **2**, 46.
— Ash, **3**, 36; **9**, 10.
— Ash, Crisp-leaved, **3**, 74.
— Ash, Single-leaved, **1**, 110; **5**, 1; **8**, 5, 26.
— Ash, Weeping, **1**, 104.
— Ash, Willow-leaved; **1**, 108.
— Beech, **1**, 102, **2**, 66; **4**, 58; **5**, 2.
— Beech, Purple, **9**, 42.
— Beech, Weeping; **8**, 7.
— Birch, White. *See Birch, European white.*
— Bird cherry, **6**, 32; **8**, 25.
— Elder, Cut-leaved; **10**, 53; **12**, 37.
— Fowering ash, 1, 23; **3**, 7, 67; **5**, 8; **6**, 16; **8**, 18; **9**, 25; **10**, 112.
— Flowering ash, Willow-leaved, **9**, 3.
— Hazel, **1**, 52; **2**, 10; **6**, 33; **8**, 21; **10**, 98; **11**, 43.
— Holly, **1**, 48; **3**, 40.
— Hornbeam, **1**, 39; **2**, 47; **6**, 4; **10**, 95; 100; **11**, 77; **12**, 1.
— Larch, **6**, 13, 29; **10**, 43, 107.
— Larch, Weeping, **6**, 23; **8**, 14; **9**, 8.
— Linden, **1**, 26; **2**, 12; **3**, 29; **4**, 3; **5**, 31; **6**, 47; **7**, 1; **9**, 91; **11**, 48; **12**, 37.
— Linden, Broad-leaved, **4**, 46; **5**, 32, 63, 64; **7**, 3.
— Linden, Silver; **1**, 27; **2**, 6; **3**, 44; **5**, 33, 36; **6**, 49; **7**, 2; **8**, 6; **9**, 9; **11**, 49; **12**, 39.
— Linden, Small-leaved, **9**, 92; **12**, 48.
— Linden, Various-leaved, **3**, 55.

— Linden, Weeping silver, **3,** 12; **5,** 34; **6,** 35; **9,** 27; **10,** 106; **12,** 36.
— Mountain-ash, **1,** 120; **9,** 61.
— Purple beech, **9,** 42; **10,** 67.
— Silver fir, **10,** 104.
— Silver linden. *See European linden, Silver.*
— Spindle-tree, **8,** 45; **9,** 67; **10,** 70.
— Weeping beech, **1,** 16; **8,** 7; **9,** 49.
— White birch. *See Birch, European white.*
— Yew. *See English yew.*
Evergreen hawthorn, **12,** 62.
Exochorda (Pearl bush), **4,** 17.
False indigo, **5,** 46; **8,** 42; **9,** 16, 37.
Fern-leaved beech, **1,** 70; **10,** 103; **12,** 69.
Field maple. English. *See English field maple.*
Fir, Cephalonian silver, **1,** 33; **3,** 17; **10,** 47.
— European silver, **10,** 104.
— Japan silver, **9,** 98.
— Noble silver, **6,** 56.
— Nordmann's silver, **1,** 13; **2,** 21; **4,** 2; **7,** 62; **11,** 52.
Five-leaved akebia, **1,** 71; **10,** 35; **12,** 61.
Flowering ash, European, **1,** 23; **3,** 7, 67; **5,** 8; **6,** 16; **8,** 18; 9, 25; **10,** 112.
— Ash, Willow-leaved, European; **9,** 3.
— Dogwood, Red; **4,** 29.
— Dogwood, **1,** 69; **3,** 4; **4,** 25; **5,** 30, 59; **7,** 44; **10,** 75; **11,** 12; **12,** 70, 79.
Fly honeysuckle, **5,** 43; **10,** 16.
Forsythia, **1,** 42; **2,** 50; **3,** 2; **4,** 41; **6,** 22; **7,** 6; **8,** 23; **9,** 29; **10,** 28; **12,** 33.
— Intermediate-leaved, **10,** 82.
— Weeping, **3,** 75; **11,** 83.
Fortune's Deutzia. *See Bush Deutzia.*
— Dwarf white spiræa, **1,** 81.
Fragrant honeysuckle, **1,** 47; **4,** 39; **5,** 10; **8,** 37; **9,** 22; **11,** 21.
French Mulberry, **1,** 45.
— Tamarisk, **2,** 39; **9,** 68.
Fringe tree, **5,** 14; **9,** 17; **10,** 49; **11,** 15.
Fringe-tree-leaved lilac. *See Josika lilac.*
Garden Azalea, **3,** 72.
— Hydrangea, **3,** 77.
Ghent azalea, **3,** 38.
Ginkgo tree, **9,** 32; **12,** 44.
Ginseng, **11,** 65.
Golden-barked Babylonian or weeping willow, **9,** 50.
Golden Bell or Forsythia, **1,** 42; **2,** 50; **3,** 2; **4,** 41; **6,** 22; **7,** 6; **8,** 23; **9,** 29; **10,** 28; **12,** 33.
— Bell, Intermediate-leaved, **10,** 82.
— Bell, Weeping, **3,** 75; **11,** 83.
— Chain. *See Laburnum.*
— English yew, **11,** 70.
— Willow. *See Yellow Willow.*
Gray birch, or American white birch, **4,** 55; **6,** 21; **7,** 59; **11,** 26.
Grecian silk vine, **10,** 51.

Gregory's Norway spruce, **3,** 62; **10,** 8.
Ground cypress, Japan. *See Japan arbor vitæ.*
Guelder rose. *See Snowball.*
Gum, Sour. *See Sour gum.*
Gum, Sweet. *See Sweet gum.*
Hackberry, **6,** 3; **8,** 35; **10,** 42, **12,** 35.
Hackmatack. *See Larch, American.*
Halesia. *See Silver bell.*
Hall's Japan honeysuckle, **7,** 18; **11,** 41.
— Japan magnolia, **1,** 105.
Haw, Black, **2,** 38; **5,** 26; **6,** 43; **8,** 10; **9,** 85; **10,** 73; **11,** 1; **12,** 28.
Hawthorn, Black, **5,** 5; **9,** 12, 21.
— Cockspur, Oval-leaved variety, **9,** 86.
— Cockspur, Variety *Neapolitana,* **11,** 36.
— Cockspur, Variety *pyracanthafolia,* **1,** 72; **12,** 43.
— Dotted fruited, **2,** 3; **2,** 28.
— English, **1,** 20; **2,** 14; **4,** 34; **5,** 53; **8,** 43; **9,** 11, 28, 90; **10,** 90; **12,** 31.
— Evergreen, **12,** 62.
— Pear, **5,** 5; **9,** 12, 21.
— Scarlet fruited, **1,** 95; **9,** 83; **11,** 32.
— Scarlet fruited, Large thorned variety, **2,** 68.
— Tender-leaved, Hybrid variety, **9,** 105.
— Washington, **2,** 63; **5,** 47; **8,** 34.
Hazel, American, **1,** 54.
— European, **1,** 52; **2,** 10; **6,** 33; **8,** 21; **10,** 98; **11,** 43.
— Witch, **4,** 38.
Heart-leaved alder, **12,** 57.
Hemlock, **1,** 41; **2,** 57; **3,** 24; **4,** 53; **5,** 15; **6,** 55; **7,** 42; **10,** 7; **11,** 24.
Hercules's club, **1,** 78, 85; **9,** 18.
Hickory, Big shellbark or kingnut, **10,** 114.
— Kingnut, **10,** 114.
— Mockernut, **2,** 18; **2,** 65; **3,** 66; **4,** 33; **11,** 6.
— Pignut, **4,** 45.
— Shagbark or shellbark, **3,** 81; **4,** 61.
— Shellbark, Big, **10,** 114.
— Small mockernut, **3,** 33; **10,** 57.
— White-heart, **2,** 18, 65; **3,** 66; **4,** 33.
Himalayan spruce, **11,** 23.
Hoary or speckled alder, **7,** 61.
Holly, American, **1,** 121; **10,** 54; **11,** 28.
— European, **1,** 48; **3,** 40.
Honey locust, **9,** 6; **10,** 69; **11,** 85.
Honeysuckle, Fly, **5,** 43; **10,** 16.
— Fragrant, **1,** 47; **4,** 39; **5,** 10; **8,** 37; **9,** 22; **11,** 21.
— Hall's Japan, **7,** 18; **11,** 41.
— Standish's, **9,** 88.
— Tartarian, **1,** 84.
— Tartarian, Variety *alba,* **9,** 93.
Hop Hornbeam, **1,** 35; **10,** 88; **11,** 86; **12,** 64.

— Tree or shrubby trefoil, **4**, 56; **5**, 21; **6**, 41; **7**, 15; **8**, 22.
Hornbeam American, **2**, 5; **4**, 20; **5**, 61; **6**, 24, 25, 34, 39, 46; **7**, 40; **10**, 64, **11**, 19; **12**, 4.
— European, **1**, 39; **2**, 47; **6**, 4; **10**, 95, 100; **11**, 77; **12**, 1.
— Hop, **1**, 35; **10**, 88; **11**, 86; **12**, 64.
Hornbeam-leaved maple, **3**, 13.
Horsechestnut, Common, **1**, 61.
— Dwarf or large racemed, **1**, 66; **10**, 110; **12**, 58.
— Red-flowering, **10**, 59; **11**, 57.
Huckleberry, **7**, 53; **10**, 77.
Hydrangea, Garden, **3**, 77.
— Panicled, **3**, 80.
— Shady, **1**, 49, **2**, 27, **9**, 4.
— Snowy, **7**, 14, 57.
Imperial cut-leaved European alder, **2**, 46.
— Paulownia, **12**, 49.
Indian bean tree. *See Catalpa.*
Indian Cedar, **3**, 71.
— Currant, **12**, 13.
Indigo, False, **5**, 46; **8**, 42; **9**, 16, 37.
Intermediate-leaved Forsythia, **10**, 82.
Irish Juniper, **3**, 19.
— Yew, **3**, 20.
Ironwood. *See Hop hornbeam.*
Japan Arbor Vitæ, Blunt-leaved, **11**, 56.
— Arbor Vitæ, Golden pea-fruiting, **3**, 18.
— Arbor Vitæ, Golden plume-leaved, **1**, 4.
— Arbor Vitæ, Obtuse-leaved, **12**, 73.
— Arbor Vitæ, Plume-leaved, **1**, 5; **3**, 39; **6**, 62; **10**, 33.
— Arbor Vitæ, Variety *squarrosa*, **1**, 6; **3**, 70.
— Aucuba, **3**, 41.
— Barberry. *See Thunberg's barberry.*
— Catalpa, Dwarf, **1**, 62; **3**, 78; **9**, 81; **10**, 111.
— Cedar, **6**, 54.
— Ground cypress, Golden pea-fruiting, **3**, 18.
— Ground cypress, Golden plume-leaved, **1**, 4.
— Ground cypress, Plume-leaved, **1**, 5; **3**, 39; **6**, 62; **10**, 33.
— Ground cypress, Variety *squarrosa*, **1**, 6; **3**, 70.
— Honeysuckle, Hall's, **7**, 18; **11**, 41.
— Judas tree, **3**, 79; **12**, 77.
— Lemon, **11**, 66.
— Magnolia, Hall's; **1**, 105.
— Mahonia or ashberry, **10**, 17.
— Maple, **3**, 5; **9**, 38.
— Pagoda tree, **1**, 38; **2**, 40; **3**, 69; **7**, 23; **9**, 39.
— Pagoda tree, Weeping, **1**, 75; **3**, 51; **11**, 30.
— Parasol tree or umbrella pine, **3**, 53.
— Plum, **4**, 15.
— Quince, **1**, 18, 34; **2**, 45; **3**, 37; **6**, 18; **7**, 11; **8**, 38; **9**, 89; **10**, 11; **11**, 84; **12**, 34.
— Silver fir, **9**, 98.
— Snowball, **3**, 15; **4**, 37; **9**, 57.
— Stachyurus, **9**, 33.
— Wistaria, **10**, 40.

— Yew, **10**, 27.
Josika lilac, **9**, 59; **10**, 1.
Judas Tree, **1**, 17; **5**, 22; **6**, 20; **7**, 22; **8**, 28; **12**, 42.
— Tree, Japan; **3**, 79; **12**, 77.
June berry, **5**, 9; **9**, 24; **10**, 74.
Juniper, Irish, **3**, 19.
— Polish, **1**, 5; **3**, 21; **10**, 6; **11**, 63.
Kentucky coffee-tree, **1**, 36, **3**, 26; **5**, 50; **9**, 45.
Kilmarnock willow, **3**, 61.
Kingnut hickory, **10**, 114.
Kœlreuteria, **1**, 7; **2**, 7; **3**, 64; **4**, 57; **5**, 65; **6**, 17; **7**, 24; **8**, 24; **9**, 15, 45; **11**, 73; **12**, 67.
Laburnum, **2**, 30; **9**, 14.
Larch, American, **10**, 105.
— European, **6**, 13, 29; **10**, 43, 107.
— European weeping, **6**, 23; **8**, 14; **9**, 8.
Large Flowered syringa, **4**, 12; **6**, 30, 52; **7**, 19, 50, 55; **8**, 32; **10**, 9.
— Racemed dwarf horse-chestnut, **1**, 66; **10**, 110; **12**, 58.
— Thorned variety of the scarlet fruited hawthorn, **2**, 68.
Laurel, Mountain, **3**, 43; **6**, 50; **10**, 14, 55.
Laurel-leaved willow, **7**, 28; **9**, 69; **10**, 80, 94.
Lawson's erect cypress, **12**, 72.
Lebanon cedar, **9**, 102.
Lemon, Japan, **11**, 66.
Lilac, **4**, 21; **5**, 67; **7**, 21; **7**, 32; **10**, 85, 86.
— Chinese, Weeping, **3**, 60.
— Fringe-tree-leaved, or Josika, **9**, 59; **10**, 1.
Lily, Day, **3**, 11.
Linden, European, **1**, 26; **2**, 12; **3**, 29; **4**, 3; **5**, 31; **6**, 46; **7**, 1; **9**, 91; **11**, 48; **12**, 37.
— European broad-leaved, **4**, 46; **5**, 32, 63, 64; **7**, 3.
— European silver, **1**, 27; **2**, 6; **3**, 44; **5**, 33, 36; **6**, 49; **7**, 2; **8**, 6; **9**, 9; **11**, 49; **12**, 39.
— European silver, Weeping, **3**, 12; **5**, 34; **6**, 35; **9**, 27; **10**, 106; **12**, 36.
— European small-leaved, **9**, 92; **12**, 48.
— European, Various-leaved, **3**, 55.
Liquidambar. *See Sweet gum.*
Locust, Bristly, **5**, 44.
— Common, **1**, 32; **4**, 28; **9**, 66; **10**, 66.
— Honey, **9**, 6; **10**, 69; **11**, 85.
Lombardy poplar, **9**, 71; **11**, 29.
Lovely azalea, **1**, 73; **3**, 42.
Madeira nut, **1**, 122; **2**, 34.
Magnolia, Hall's Japan, **1**, 105.
— Purple, **11**, 37.
— Soulange's, **1**, 80; **6**, 10; **7**, 56; **9**, 54; **11**, 38; **12**, 53.
— Swamp, **1**, 106; **10**, 60.
Mahonia, Japan or ash-berry, **10**, 17.
Maple, ash-leaved or box elder, **1**, 93; **2**, 4; **4**, 6; **5**, 55; **6**, 27; **8**, 9; **9**, 26; **11**, 42.
— Colchicum-leaved, **3**, 14; **11**, 50.

— Eagle's claw, **1**, 9.
— English or field, **1**, 25; **2**, 59; **4**, 54; **5**, 66; **10**, 23; **12**, 66.
— Hornbeam-leaved, **3**, 13.
— Japan, **3**, 5; **9**, 38.
— Mountain, **9**, 95.
— Northern China, **9**, 63.
— Norway, **2**, 20; **3**, 32; **4**, 47; **5**, 29; **6**, 40; **9**, 36; **12**, 71.
— Norway, Purple-leaved variety *Geneva*, **9**, 62.
— Red, **2**, 62; **4**, 16; **5**, 28; **6**, 31, 36; **7**, 35; **8**, 12; **10**, 21; **11**, 13; **12**, 12.
— Round-leaved, **9**, 34.
— Silver, **1**, 10; **2**, 64; **3**, 59; **4**, 31; **5**, 27; **8**, 40; **9**, 7; **10**, 10; **11**, 47; **12**, 40.
— Silver, Weir's cut-leaved, **9**, 107; **10**, 83.
— Striped, or moosewood, **2**, 67; **5**, 13; **10**, 97.
— Sugar or rock, **1**, 99; **2**, 60; **3**, 35; **7**, 27; **8**, 2; **10**, 24; **12**, 46.
— Sycamore, **2**, 58; **3**, 25; **4**, 5; **5**, 39, 56; **8**, 53; **9**, 35; **11**, 44; **12**, 41.
— Sycamore, Purple-leaved, **3**, 54.
— Vine, **9**, 34.
— White. *See Maple, Silver.*
Maple-leaved arrowwood or dockmackie, **2**, 44.
Missouri currant, **11**, 8.
Mock Orange (*Sweet syringa*), **1**, 74; **4**, 19; **6**, 28; **7**, 9, 54.
— Orange, Scentless, **9**, 84.
Mockernut, Hickory, **2**, 18; **2**, 65; **3**, 66; **4**, 33; **11**, 6,
— Hickory, Small, **3**, 33; **10**, 57.
Moosewood, or striped maple, **2**, 67; **5**, 13; **10**, 97.
Mossy-cup, or bur oak, **1**, 117; **8**, 47; **9**, 96; **12**, 82.
Mount Atlas or African Cedar, **11**, 53.
Mountain Laurel, **3**, 43; **6**, 59; **10**, 14, 55.
— Maple, **9**, 95.
— Sumac, Dwarf, **1**, 46; **9**, 60, 94; **12**, 23.
Mountain-ash, European, **1**, 120; **9**, 61.
Mountain-ash-leaved spiræa, **7**, 38; **12**, 14.
Mugho pine, **1**, 31; **2**, 29; **7**, 48; **10**, 18.
Mulberry Black, **2**, 48.
— French, **1**, 45.
— Paper, **9**, 97.
— Red, **10**, 102.
— Russian weeping, **3**, 58.
— Weeping, Teas's or Russian, **3**, 58.
— White, **1**, 58; **2**, 35; **9**, 82.
Myrtle, Wax, **9**, 47.
New American willow, **9**, 41.
Ninebark, **3**, 76; **5**, 12; **6**, 53; **8**, 20; **9**, 20; **10**, 65; **12**, 16.
Noble silver fir, **6**, 56.
Nordmann's silver fir, **1**, 13; **2**, 21; **4**, 2; **7**, 62; **11**, 52.
Northern prickly ash, **8**, 31.
Norway maple, **2**, 20; **3**, 32; **4**, 47; **5**, 29; **6**, 40; **9**, 36; **12**, 71.
— Maple, Purple-leaved, variety *Geneva*, **9**, 62.

— Spruce, **3**, 56; **4**, 52; **5**, 19; **6**, 12; **7**, 45; **10**, 91; **11**, 2.
— Spruce, Gregory's, **3**, 62; **10**, 8.
— Spruce, Weeping, **1**, 76.
Oak, Black, **2**, 56; **4**, 44; **9**, 52; **11**, 10; **11**, 25.
— Bur, **1**, 117; **8**, 47; **9**, 96; **12**, 82.
— Chestnut, **12**, 56.
— English, **1**, 65; **9**, 100; **12**, 21.
— English, Weeping; **1**, 1.
— Mossy-cup, **1**, 117; **8**, 47; **9**, 96; **12**, 82.
— Pin, or Swamp Spanish, **2**, 61; **9**, 51; **11**, 78; **12**, 55, 78.
— Pyramid, **9**, 65.
— Red, **1**, 116; **4**, 23; **10**, 84; **11**, 74; **12**, 81.
— Scarlet, **1**, 101; **4**, 36; **11**, 5.
Oak, Swamp Spanish. *See Pin oak.*
Oak Turkey, **1**, 109; **12**, 74.
— Weeping English, **1**, 1.
— White, **2**, 13; **4**, 32; **11**, 9; **12**, 6.
— Willow, **1**, 111.
Obtuse-leaved Japan arbor vitæ, **12**, 73.
Oleaster, **1**, 112; **6**, 26; **7**, 16; **8**, 13, 36; **11**, 81.
— Umbel-flowered, **9**, 106.
Orange, Mock. *See Mock orange.*
— Osage, **7**, 30; **10**, 87; **11**, 14.
Oriental Arbor Vitæ, Thread-like, **11**, 69.
— Plane tree, **1**, 57, 59; **6**, 1; **11**, 79.
— Spruce, **1**, 14; **5**, 25; **10**, 41.
Osage Orange, **7**, 30; **10**, 87; **11**, 14.
Osier, Red, **8**, 11; **10**, 52; **11**, 58.
— Siberian red, **8**, 46.
Oval-leaved variety, cockspur thorn, **9**, 86.
Pagoda Tree, Japan, **1**, 38; **2**, 40; **3**, 69; **7**, 23; **9**, 39.
— Tree, Weeping Japan, **1**, 75; **3**, 51; **11**, 30.
Panicled Dogwood, **11**, 3.
— Hydrangea, **3**, 80.
Paper Birch, **1**, 12; **4**, 26; **5**, 18; **7**, 43; **12**, 26.
— Mulberry, **9**, 97.
Paulownia, Imperial, **12**, 49.
Pea tree, Siberian, **2**, 31; **4**, 50; **9**, 31.
Peach, Red-flowering, Double, **3**, 63.
Pear hawthorn, **5**, 5; **9**, 12, 21.
Pearl bush, **4**, 17.
Pepper Bush, Common sweet; **2**, 11; **10**, 22; **11**, 4; **12**, 80.
Pepperidge, or sour gum, **2**, 55; **11**, 55; **12**, 45.
Persimmon, **5**, 60.
Pignut hickory, **4**, 45.
Pin or swamp Spanish oak, **2**, 61; **9**, 51; **11**, 78; **12**, 55, 78.
Pine, Austrian, **1**, 2; **2**, 52; **3**, 6; **4**, 9; **5**, 42; **6**, 14; **9**, 43; **10**, 30; **12**, 25.
— Bhotan, **1**, 37; **2**, 25, 43; **4**, 7; **10**, 5.
— Corsican, **1**, 89.
— Mugho, **1**, 31; **2**, 29; **7**, 48; **10**, 18.
— Pitch, **7**, 63.
— Scotch, **1**, 60; **6**, 15; **7**, 49.

— Swiss stone, **1**, 3; **3**, 22; **4**, 27; **5**, 3; **12**, 60.
— Umbrella, **3**, 53.
— White, **3**, 28; **5**, 58; **10**, 26; **11**, 46; **12**, 22.
Pipe vine or Dutchman's pipe, **11**, 72.
Pitch pine, **7**, 63.
Plane tree, Oriental, **1**, 57, 59; **6**, 1; **11**, 79.
Plum, Japan, **4**, 15.
Plume-leaved English elm, **6**, 64.
— Japan ground cypress. *See Japan ground cypress, Plume-leaved.*
Podocarpus, Chinese, **3**, 31.
Polish juniper, **1**, 5; **3**, 21; **10**, 6; **11**, 63.
Poplar, Lombardy, **9**, 71; **11**, 29.
— White, **10**, 71.
Prickly ash, Northern, **8**, 31.
Privet, Californian, **1**, 94, **2**, 1; **4**, 40; **8**, 16; **9**, 44; **11**, 18; **12**, 2, 24.
— Common, **11**, 20; **12**, 18.
Purple Barberry, **1**, 68; **4**, 42; **7**, 41.
— Beech, European; **9**, 42, **10**, 67.
— Magnolia, **11**, 37.
— Willow, **10**, 113, 115.
Purple-leaved English elm, **1**, 86; **12**, 75.
— Norway maple, variety *Geneva*, **9**, 62.
— Sycamore maple, **3**, 54.
Pyramid oak, **9**, 65.
Pyramidal variety, American arbor vitæ, **5**, 24.
Quince, Chinese, **5**, 48.
— Japan, **1**, 18, 34; **2**, 45; **3**, 37; **6**, 18; **7**, 11; **8**, 38; **9**, 89; **10**, 11; **11**, 84; **12**, 34.
Ramanas rose, **11**, 7.
Red Birch, **1**, 103.
— Cedar, **5**, 23.
— Cherry, Wild, **2**, 26.
— Maple, **2**, 62; **4**, 16; **5**, 28; **6**, 31, 36; **7**, 35; **8**, 12; **10**, 21; **11**, 13; **12**, 12.
— Mulberry, **10**, 102.
— Oak, **1**, 116; **4**, 23; **10**, 84; **11**, 74; **12**, 81.
— Osier, **8**, 11; **10**, 52; **11**, 58.
— Osier, Siberian, **8**, 46.
Redbud. *See Judas tree.*
Red-flowering Dogwood, **4**, 29.
— Horsechestnut, **10**, 59; **11**, 57.
— Peach, Double, **3**, 63.
Reeve's spiræa, Double flowered, **1**, 30; **5**, 4.
Reeve's spiræa, Single flowered, **1**, 29; **5**, 6; **7**, 10; **9**, 72; **10**, 72.
Retinospora. *See Japan arbor vitæ.*
Rhododendron (Rosy lilac colored flowers), **11**, 68.
Rhododendrons, Various kinds, **3**, 46; **10**, 13.
Ring-leaved willow, **9**, 79.
River birch, **1**, 103.
Rock or sugar maple, **2**, 60; **3**, 35; **7**, 27; **8**, 2; **10**, 24; **12**, 46.
Rose of Sharon, or althæa, **11**, 31.
Rose, Ramanas, **11**, 7.
Round-leaved maple, **9**, 34.
Rowan tree. *See European mountain ash.*
Royal white willow, **10**, 78.
Russian weeping mulberry, **3**, 58.
Salmon-barked willow, **9**, 80.

Sassafras, **1**, 43; **3**, 82; **4**, 63; **5**, 57; **11**, 76; **12**, 7.
Scarlet Fruited hawthorn, **1**, 95; **9**, 83; **11**, 32.
— Fruited hawthorn, Large thorned variety, **2**, 68.
— Oak, **1**, 101; **4**, 36; **11**, 5.
Scentless mock orange or syringa, **9**, 84.
Scotch Elm, **1**, 11; **2**, 49; **3**, 50; **7**, 46; **8**, 8; **9**, 75; **11**, 60; **12**, 10.
— Pine, **1**, 60; **6**, 15; **7**, 49.
Senna, Bladder, **9**, 103.
Service berry, **5**, 9; **9**, 24; **10**, 74.
Sessile-leaved Weigela, **1**, 114; **12**, 59.
Shadbush, **5**, 9; **9**, 24; **10**, 74.
Shady hydrangea, **1**, 49; **2**, 27; **9**, 4.
Shagbark or shellbark hickory, **3**, 81; **4**, 61.
Sheepberry, **9**, 104; **12**, 54.
Shellbark or shagbark hickory, **3**, 81; **4**, 61.
Shrubby Trefoil, **4**, 56; **5**, 21; **6**, 41; **7**, 15; **8**, 22.
— Wistaria, **3**, 3.
Siberian Pea tree, **2**, 31; **4**, 50; **9**, 31.
— Red Osier, **8**, 46.
Silk vine, Grecian, **10**, 51.
Silver Bell or snowdrop tree, **1**, 24; **5**, 45; **7**, 12; **11**, 34.
— Fir, Cephalonian, **1**, 33; **3**, 17; **10**, 47.
— Fir, European, **10**, 104.
— Fir, Japan, **9**, 98.
— Fir, Noble, **6**, 56. **12**, 19.
— Fir, Nordmann's, **1**, 13; **2**, 21; **4**, 2; **7**, 62; **11**, 52.
— Linden, European, **1**, 27; **2**, 6; **3**, 44; **5**, 33, 36; **6**, 49; **7**, 2; **8**, 6; **9**, 9; **11**, 49; **12**, 39.
— Linden, Weeping European, **3**, 12; **5**, 34; **6**, 35; **9**, 27; **10**, 106; **12**, 36.
— Maple, **1**, 10; **2**, 64; **3**, 59; **4**, 31; **5**, 27; **8**, 40; **9**, 7; **10**, 10; **11**, 47; **12**, 40.
— Maple, Weir's cut-leaved; **9**, 107; **10**, 83.
Single-leaved European ash, **1**, 110; **5**, 1; **8**, 5, 26.
Slender Deutzia, **1**, 67; **3**, 30; **10**, 39; **11**, 40.
Small mockernut hickory, **3**, 33; **10**, 57.
Small-leaved European linden, **9**, 92; **12**, 48.
Smoke tree, **1**, 28; **9**, 19.
Smooth Alder, **9**, 99.
— Branched English elm, **12**, 9.
— Sumac, **12**, 17.
— Winterberry, **1**, 118.
Snowball, Common, **1**, 40; **8**, 49.
— Japan, **3**, 15; **4**, 37; **9**, 57.
Snowdrop tree. *See Silver bell.*
Snowy hydrangea, **7**, 14, 57.
Soulange's magnolia, **1**, 80; **6**, 10; **7**, 56; **9**, 54; **11**, 38; **12**, 53.
Sour gum or pepperidge, **2**, 55; **11**, 55; **12**, 45.
Southern catalpa. *See Catalpa, Southern.*
Spanish chestnut, **1**, 100;
Speckled or hoary alder, **7**, 61.
Spicebush, **1**, 107; **2**, 24; **3**, 65; **10**, 38.

Spindle-tree, European, **8**, 45; **9**, 67; **10**, 70.
— Thunberg's, **1**, 119.
— Winged, **1**, 119.
Spiræa, Bridal wreath, **1**, 44; **5**, 35; **7**, 13.
— Bumald's, **1**, 8.
— Fortune's dwarf white, **1**, 81.
— Mountain-ash-leaved, **7**, 38; **12**, 14.
— Reeve's double-flowered, **1**, 30; **5**, 4.
— Reeve's single-flowered, **1**, 29; **5**, 6; **7**, 10; **9**, 72; **10**, 72.
— Van Houtte's, **2**, 33; **4**, 14; **5**, 7; **10**, 45; **11**, 82.
Spruce, Alcock's, **6**, 57.
— Colorado blue, **2**, 19; **4**, 8.
— Gregory's Norway; **3**, 62; **10**, 8.
— Himalayan, **11**, 23.
— Norway, **3**, 56; **4**, 52; **5**, 19; **6**, 12; **7**, 45; **10**, 91; **11**, 2.
— Norway, Gregory's, **3**, 62; **10**, 8.
— Norway, Weeping, **1**, 76.
— Oriental, **1**, 14; **5**, 25; **10**, 41.
— Weeping Norway, **1**, 76.
Stachyurus, Japan, **9**, 33.
Staghorn sumac, **1**, 33.
Standish's honeysuckle, **9**, 88.
Stone pine, Swiss, **1**, 3; **3**, 22; **4**, 27; **5**, 3; **12**, 60.
Strawberry Bush, American, **11**, 17.
— Shrub, Sweet scented, **11**, 16.
Striped maple or moose-wood, **2**, 67; **5**, 13; **10**, 97.
Sugar or rock maple, **1**, 99; **2**, 60; **3**, 35; **7**, 27; **8**, 2; **10**, 24; **12**, 46.
Sugarberry, **6**, 3; **8**, 35; **10**, 42; **12**, 35.
Sumac, Dwarf mountain, **1**, 46; **9**, 60, 94; **12**, 23.
— Smooth, **12**, 17.
— Staghorn, **1**, 53.
Swamp magnolia, **1**, 106; **10**, 60.
— Spanish oak. *See Pin oak.*
Sweet Bay or swamp magnolia, **1**, 106; **10**, 60.
— Birch. *See Cherry birch.*
— Buckeye, **10**, 58.
— Gum or bilsted, **1**, 96; **2**, 17; **11**, 45; **12**, 8.
— Pepper bush, Common, **2**, 11; **10**, 22; **11**, 4; **12**, 80.
— Scented strawberry shrub, **11**, 16.
— Syringa, **1**, 74; **4**, 19; **6**, 28; **7**, 9, 54.
— Viburnum, **9**, 104; **12**, 54.
Swiss stone pine, **1**, 3; **3**, 22; **4**, 27; **5**, 3; **12**, 60.
Sycamore. *See Buttonwood.*
Sycamore Maple, **2**, 58; **3**, 25; **4**, 5; **5**, 39, 56; **8**, 53; **9**, 35; **11**, 44; **12**, 41.
— Maple, Purple-leaved, **3**, 54.
Syringa, (Philadelphus), Large-flowered, **4**, 12; **6**, 30, 52; **7**, 19, 50, 55; **8**, 32; **10**, 9.
— Scentless, **9**, 84.
— Sweet, **1**, 74; **4**, 19; **6**, 28; **7**, 9, 54.
— White-stamened, **10**, 12.

Tamarack. *See Larch, American.*
Tamarisk, French, **2**, 39; **9**, 68.
Tartarian Honeysuckle, **1**, 84.
— Honeysuckle, Variety *alba*, **9**, 93.
Teas's Weeping mulberry, **3**, 58.
Thorn. *See Hawthorn.*
Thread-like Oriental arbor vitæ, **11**, 69.
Thunberg's Barberry, **4**, 13.
— Spindle tree, **1**, 119.
Toothache tree. *See Northern prickly ash.*
Tree Alder. *See Alder, European.*
— Box. *See Box.*
— Celandine, **10**, 48.
Tree-of-Heaven, **9**, 56; **12**, 15.
Trefoil, Shrubby or hop tree, **4**, 56; **5**, 21; **7**, 15; **8**, 22.
Tulip tree, **1**, 88; **2**, 23; **3**, 47; **4**, 1; **5**, 41; **6**, 6; **7**, 5; **8**, 17; **10**, 68; **11**, 51.
Tupelo. *See Sour gum.*
Turkey oak, **1**, 109; **12**, 74.
Umbel-flowered oleaster, **9**, 106.
Umbrella Pine, **3**, 53.
— Tree, **1**, 83; **5**, 38; **6**, 8; **7**, 37; **9**, 53; **10**, 61.
Van Houtte's spiræa, **2**, 33; **4**, 14; **5**, 7; **10**, 45; **11**, 82.
Variegated English yew, **2**, 42; **6**, 63; **11**, 67.
— Weigela, **2**, 22; **4**, 18; **6**, 19.
Various-leaved European linden, **3**, 55.
Viburnum, Dentatum, **1**, 55; **5**, 40; **8**, 44; **9**, 48; **10**, 79.
— Lentago, **9**, 104; **12**, 54.
— Rugosum, **10**, 89.
— Sweet, **9**, 104; **12**, 54.
Vine, Grecian silk, **10**, 51.
— Maple, **9**, 34.
Walnut, Black, **1**, 91; **3**, 8; **4**, 60.
— Caucasian, **11**, 61.
— English, **1**, 122; **2**, 34.
Washington thorn, **2**, 63; **5**, 47; **8**, 34.
Water beech. *See Hornbeam, American.*
Wax myrtle, **9**, 47.
Wayfaring tree, **10**, 89.
Weeping Bald cypress, **2**, 32; **6**, 44; **9**, 55.
— Beech, European, **1**, 16; **8**, 7; **9**, 49.
— Chinese lilac, **3**, 60.
— Cut-leaved European white birch, **9**, 23.
— English oak, **1**, 1.
— English yew, **3**, 68.
— European ash, **1**, 104.
— European beech, **1**, 16; **8**, 7; **9**, 49.
— European larch, **6**, 23; **8**, 14; **9**, 8.
— European silver linden, **3**, 12; **5**, 34; **6**, 35; **9**, 27; **10**, 106; **12**, 36.
— Golden bell or Forsythia, **3**, 75; **11**, 83.
— Japan pagoda tree, **1**, 75; **3**, 51; **11**, 30.
— Mulberry, Teas's or Russian, **3**, 58.
— Norway spruce, **1**, 76.
— Willow, **1**, 64; **10**, 109.
Weigela, **1**, 90; **5**, 11, 17, 54; **6**, 51; **7**, 4, 8; **8**, 27, 48, 50; **10**, 29; **12**, 65.

— Sessile-leaved, **1**, 114; **12**, 59.
— Variegated, **2**, 22; **4**, 18; **6**, 19.
Weir's cut-leaved silver maple, **9**, 107; **10**, 83.
White Ash, **1**, 92; **3**, 73; **4**, 35; **5**, 20; **6**, 45; **7**, 25; **8**, 3; **10**, 62.
— Beam tree, **11**, 75.
— Birch, American, **4**, 55; **6**, 21; **7**, 59; **11**, 26.
— Birch, European, **9**, 1, 76.
— Elm, **3**, 10; **4**, 49; **6**, 9; **7**, 17, 26; **8**, 33; **9**, 74; **10**, 101; **11**, 27; **12**, 11.
— Mulberry, **1**, 58; **2**, 35; **9**, 82.
— Oak, **2**, 13; **4**, 32; **11**, 9; **12**, 6.
— Pine, **3**, 28; **5**, 58; **10**, 26; **11**, 46; **12**, 22.
— Poplar, **10**, 71.
— Stamened syringa, **10**, 12.
— Willow, Royal, **10**, 78.
White-heart hickory, **2**, 18, 65; **3**, 66; **4**, 33.
Wild red cherry, **2**, 26.
Willow, Babylonian or weeping, **1**, 64; **10**, 100.
— Babylonian, Golden-barked, **9**, 50.
— Bay, **7**, 28; **9**, 69; **10**, 80, 94.
— Blue, **3**, 57; **10**, 81.
— Curled-leaved, **9**, 79. **11**, 67.
— Golden barked Babylonian, **9**, 50.
— Golden or yellow, **6**, 50; **7**, 33; **10**, 32.
— Kilmarnock, **3**, 61.
— Laurel-leaved, **7**, 28; **9**, 69; **10**, 80, 94.
— New American, **9**, 41.
— Oak, **1**, 111.
— Purple, **10**, 113, 115.
— Ring-leaved, **9**, 79.
— Royal white, **10**, 78.
— Salmon barked, **9**, 80.
— Weeping, **1**, 64; **10**, 109.
— Weeping, Golden barked; **9**, 50.
— White, Royal, **10**, 78.
— Yellow, **6**, 50; **7**, 33; **10**, 32.
Willow-leaved European ash, **1**, 108.
— European flowering ash, **9**, 3.
Winterberry, Common, or black alder, **11**, 33.
— Smooth, **1**, 118.
Wistaria, Chinese, **7**, 7; **10**, 37.
— Japan, **10**, 40.
— Shrubby, **3**, 3.
Witch hazel, **4**, 38.
Yellow Birch, **6**, 2; **12**, 20.
— Flowered buckeye, **2**, 37.
— Willow, **6**, 50; **7**, 33; **10**, 32.
Yellow-wood, **1**, 50; **2**, 9; **4**, 51; **5**, 16; **9**, 30; **11**, 35; **12**, 68.
Yew, European or English, **3**, 16; **10**, 19; **11**, 62; **12**, 63.
— European or English, Golden, **11**, 70.
— European or English, Variegated, **2**, 42; **6**, 63;
— European or English, Weeping, **3**, 68.
— Irish, **3**, 20.
— Japan, **10**, 27.
— Variegated English, **2**, 42; **6**, 63; **11**, 67.
Yucca, **3**, 48.

..Notes..

—32 many birches, a large rock by
—34 " " " " "
was blasted down for new Jer

. . Notes . .

Notes

14 DAY USE
RETURN TO DESK FROM WHICH BORROWED
LOAN DEPT.
RENEWALS ONLY—TEL. NO. 642-3405
This book is due on the last date stamped below, or
on the date to which renewed.
Renewed books are subject to immediate recall.

ICLF (N)

MAY 26 1969

COATES

JUN 23 1969

RECEIVED

JUN 6 '69 AM

LOAN DEPT.

LD 21A–40m-2,'69
(J6057s10)476—A-32

General Library
University of California
Berkeley